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MAUMEE RIVER BASIN LEVEL B STUDY

Report on the January-February 1976 Public Involvement

Great Lakes Basin Commission

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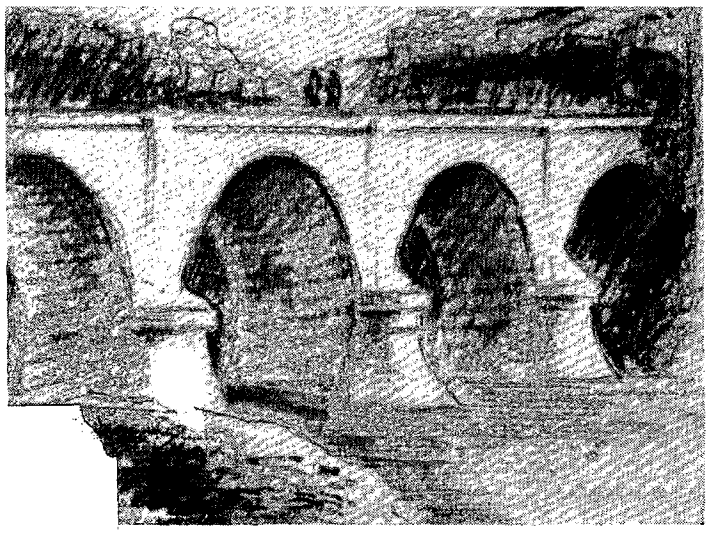


GREAT LAKES BASIN COMMISSION

MRB SERIES NO. 6

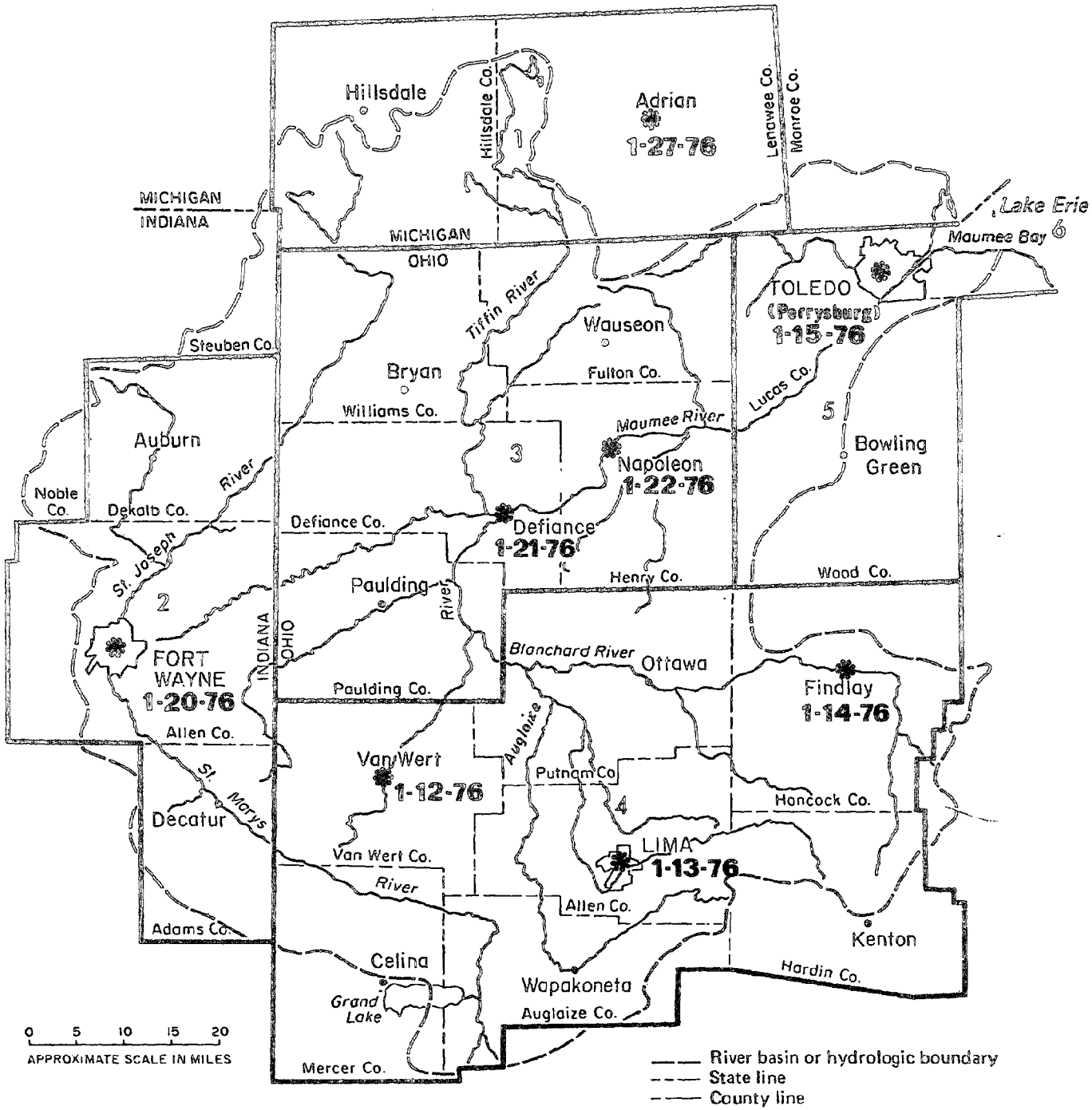
MARCH 1976

MAUMEE RIVER BASIN

INDIANA, MICHIGAN AND OHIO

Great Lakes Basin Commission

STUDY AREA:
Hydrologic area - 6,919 square miles
Planning subareas (county boundaries) - 8,981 square miles
1970 population (county boundaries) - 1,518,480



*** Public forum location & date**

MAUMEE RIVER BASIN LEVEL B STUDY

Report on the January-February 1976 Public Involvement

TD225. M5 M42 1976

This report is being made available to all who have expressed interest in the Maumee River Basin Level B Study. If you know of others who are interested, send us their names and addresses, and we will be happy to mail them a free copy.

The "minutes" of the January 1976 public forums—verbatim transcripts of the recorders' notes from each work group—are published in Section 3 of this report. Section 2 presents an interpretive staff summary of the issues raised in the forums. Section 4 presents the results of a public opinion questionnaire distributed in January.

If you feel important points were not made at the forums or included in the recorders' notes, please let us know and we will make note of them. We welcome your ideas—that is the purpose of public involvement. Comments on any portion of the Maumee River Basin Level B Study should be addressed to:

Study Manager
Great Lakes Basin Commission
3475 Plymouth Road,
P.O. Box 999
Ann Arbor, Michigan 48106

or

Art Brewer, Chairman
Citizens' Advisory Committee
Route 2
P.O. Box 39
Morenci, Michigan 49256

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1
INTRODUCTION

The Maumee River Basin Level B Study is a coordinated State, Federal, and local effort to plan use of the Basin's water and related land resources through the year 1990 and in general up to the year 2020. This kind of coordinated planning is needed when complex resource problems are related to one another in ways that transcend normal government boundaries. For example, farming, building, and other land uses in upstream counties of a watershed such as the Maumee Basin can cause sedimentation, pollution, or flow changes which may add to water quality and supply problems in downstream counties. The Maumee Basin was chosen for the first "Level B" study in the Great Lakes Basin because of its interstate nature and the complexity of its water and related land resource needs, problems, and issues.

"Level B" studies of regional watersheds like the Maumee Basin are part of the resource planning process proposed under the Water Resources Planning Act (P.L. 89-80) and the Federal Water Pollution Control Act Amendments of 1972 (Section 209, P.L. 92-500). The study is coordinated by the Great Lakes Basin Commission (GLBC), a State-Federal body under the U.S. Water Resources Council. Three States–Ohio, Indiana, and Michigan–are taking part in the Maumee Basin Study along with many local agencies and groups.

The present two-year Maumee Basin Study, begun in 1974, takes a streamlined approach to Level B planning which emphasizes State leadership and continuous public participation in the formulation of a final plan. One mechanism for public participation is the Citizens' Advisory Committee (CAC), a nonpartisan group of 30 private citizens from the three States who work closely with the government planners in guiding plan development. A list of CAC members is presented at the end of this chapter. Because the success of any middle-range plan for resource use depends on the broad and continuing support of public opinion, the goals of a wide range of Basin residents must be considered in formulating such a plan.

The first phase of the Maumee study, completed in 1974, was a preliminary assessment of the Basin's resource problems, needs, and opportunities. The *Interim Report,* which briefly and tentatively described alternative solutions to these problems, was published in 1974.

These alternative solutions were reviewed and refined during the second phase of the study. A major part of this review was accomplished through a series of five public workshops held in cities across the Basin during October 1974. The workshops were broadly publicized and attracted more than 400 people. They were arranged by the Citizens' Advisory Committee, who solicited public reaction to the study both before and after the workshops. Following this review, the CAC published its *Goals Report* in March 1975.

The Maumee Study Planning Board further developed details of the alternative plans from a series of technical reports prepared by participating government agencies. The end product of the study's second phase was the booklet *Alternative Plans for Public Action* (published in January 1976) which presented the alternative solutions in still more detail. In this booklet, two alternatives were developed, one emphasizing environmental quality (EQ), and the other emphasizing economic development (ED). A third option–"Continue Present Programs" (C)–was also presented, as a point of comparison from which to evaluate the EQ and ED plans.

In the third phase of the study, the more detailed alternative plans were considered in a series of open and informal public forums in eight cities during January 1976. The eight cities were Van Wert, Lima, Findlay, Toledo (Perrysburg), Defiance, and Napoleon, Ohio; Fort Wayne, Indiana; and Adrian, Michigan. (Specific locations and dates are shown on the map at the front of this report.) At the time of the forums, written comments on the alternative plans were also solicited, and a questionnaire was mailed to everyone on the Maumee study mailing list.

PURPOSE

The purposes of the public forums were to:

- present the *Alternative Plans for Public Action*
- relate alternative plans to public goals for the Maumee Basin
- discuss these and other alternatives with the Basin residents
- determine what the Basin residents would like to have incorporated into the selected plan.

It was emphasized at the public forums that the idea was not to choose either the EQ or ED alternative, but rather to use these two alternatives as a starting point for discussion. Members of the attending public were encouraged to state their preferences for many options to be considered in a selected plan, whether embodied in the *Alternative Plans* booklet or not. Those unable to attend or wishing to express their views at greater length were encouraged to respond in writing.

The purpose of the questionnaire was to quantify public choices and concerns in a way that would assist the planning process. The questionnaire mailing was accompanied by a table, called a matrix, summarizing the issues addressed by each component of the alternative plans and the beneficial and adverse

CITIZENS ADVISORY COMMITTEE

CHAIRMAN–ART BREWER **VICE-CHAIRMAN–ROBERT C. ARNOLD**

OHIO

1. June M. Brown, League of Women Voters, Toledo
2. Jeffrey C. Burnham, Medical College of Ohio, Toledo
3. Clyde E. Burt, Ohio Audubon Council, Melrose
4. Frank T. DuByne, Campbell Soup Company, Napoleon
5. Leigh E. Eisenhauer, Maumee Watershed Conservancy District, Van Wert
6. Peter Fraleigh, The University of Toledo, Toledo (Original member was Elliot Tramer)
7. C. Ramond Hanes, Technical Advisory Committee, L-ACRPC, Lima
8. Agnes M. Hooley, Bowling Green State University, Bowling Green
9. Larry Kandel, Ohio Farm Bureau Federation, Inc., Findlay
10. John R. Lesniewicz, Lake Erie Wildfowlers, Toledo
11. Steve Mohr, Henry County Farm Bureau, Napoleon
12. Marcia Reed, American Association of University Women, Millbury (Original member was Mrs. Thomas Maguire)
13. Harold Rohrs, Maumee Valley Resources Conservation and Development, Napoleon
14. Glen Speith, Inter-county Board of Trustees, Napoleon
15. Beatrice Waterbury, League of Women Voters, Toledo
16. Suzan C. Wilkins, Friends of the Maumee, Inc., Perrysburg (Original member was Jeannie Hawkins, Ohio Environmental Council)
17. George Wilson, Lucas County Engineer, Toledo (Original member was James M. Holzemer, Lucas County Commissioner, Toledo)
18. Edwin R. Wyrick, County Engineers Association, Wauseon (Original members: Ned Skeldon, Clear Water, Inc., Toledo; Russell Voegtlen, Toledo Port Authority, Toledo; Mrs. L. M. Young, League of Women Voters, Perrysburg)

INDIANA

19. Robert C. Arnold, Indiana Park and Recreation Association, Ft. Wayne
20. Guy M. Beerbower, Allen County Farm Bureau, Inc., Grabill
21. Mrs. Thomas E. Dustin, The Izaak Walton League of America, Huntertown
22. Charles Elcock, Indiana State Chamber of Commerce, Ft. Wayne (Original member was Jack W. Rice)
23. Ernest J. Lesiuk, Indiana Association of Agriculture Extension Agents, Ft. Wayne
24. Ellis McFadden, Indiana Association of Soil and Water Conservation District, Inc., Fort Wayne
25. Rebecca C. Meier, League of Women Voters of Indiana, Bluffton
26. Richard L. Prader, Indiana Conservation Council, Inc., Fort Wayne
27. Bruce Yoder, Indiana Planning Association, Fort Wayne (Original member was Ned Beck)

MICHIGAN

28. Art Brewer, Morenci
29. Deane Lockwood, Pittsford
30. Vacant (Original member was Paul Goode, Hudson)

impacts of each component. Copies and results of the questionnaire are included in Section 6 of this report.

The purpose of this *Report on the January-February 1976 Public Involvement* is to:

- summarize the small work-group discussions which took place during the forums
- present the notes taken by the work-group recorders in their entirety
- provide a listing of the written comments received from the public and available from the Great Lakes Basin Commission
- record the attendance at the forums
- display the results of the questionnaire.

This booklet, as well as the *Citizens' Advisory Committee Goals Report* and the *Report on the October 1974 Public Workshops,* will help the CAC and Planning Board to formulate a selected plan. This report will also serve as a public record allowing as many people as possible to review the forum results and, if they wish, to comment further.

PRIOR INFORMATION

Announcements of the January 1976 Maumee public forums were mailed to all persons and groups on the Maumee Study mailing list along with pertinent background materials. The mailing list included the names of 1,400 Maumee Basin residents and more than 400 additional names of news media, organizations, firms, governmental agencies, etc. The CAC *Goals Report,* the booklet *Alternative Plans for Public Action,* and a brochure briefly describing the Maumee Study were sent to these 1,800 persons and groups in two separate mailings prior to the forums. Included with these materials were agendas and maps for the forum locations nearest to the addressees. A list of all Maumee study documents and two sample copies of each were available for public review at the entrance to each forum. The list is included at the end of this chapter.

News of the Maumee forums was announced in the Great Lakes Basin Commission's monthly newsletter, the *Communica-*

tor, which is mailed to 14,000 Great Lakes area residents, including nearly 1,200 newspeople, about 100 of whom represent local media in the Maumee Basin area. More than 140 broadcasters, newsletter editors, and newspaper reporters and editors in the Maumee area received two press releases announcing the forums. Each then received a subsequent announcement, including background materials on items of special interest to people in specific subareas of the Basin. In all, a total of five separate subarea mailings followed two basinwide press announcements.

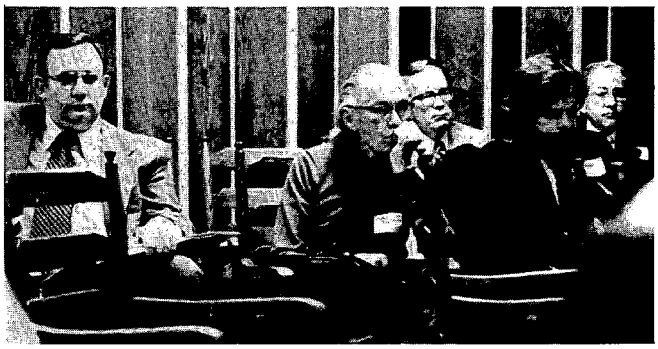
Telephone contact followed the press announcements prior to each of the eight forums. Announcements were carried by all types of news media, including television, radio, and newspapers. Included in this section are some examples of the newspaper coverage.

PUBLIC FORUM ARRANGEMENTS AND STRUCTURE

Most physical arrangements for the forums were made by local members of the Citizens' Advisory Committee. They reserved meeting space, arranged for and served as moderators and recorders, and helped wherever needed. These CAC members were assisted by Great Lakes Basin Commission staff in setting up the forums.

Each forum was chaired by the CAC chairman Art Brewer, vice-chairman Robert Arnold, or a local CAC member. Forums began with introductory remarks from the forum chairman, followed by a 25-minute slide presentation by the GLBC staff. Following the slide presentation, the participants broke up into work groups. Forum attendees joined, according to their preference, one of five groups. One group discussed all components of both plans, others focused on selected portions of the plans. One group discussed land resources management and erosion and sedimentation problems. Another focused on water quality, water supply, and flood plains. Another group discussed outdoor recreation and fish and wildlife. At the Toledo forum in Perrysburg, a special group on Maumee Bay was formed.

Approximately 90 minutes of each forum was devoted to these small work groups. Each group had a moderator and a recorder. The moderator was responsible for leading the group, keeping the discussion flowing, and insuring that everyone had a chance to participate. A member of the Planning Board or GLBC staff was placed in each of the work groups to help answer any technical questions posed by the group and also to get a first-hand "feel" of what the citizens of the Basin would like to have incorporated in the selected plan. The recorder took notes on each work group's discussion and a summary was presented by the moderator or recorder to all the workshop attendees in a final wrap-up session. At this point, group members were given the opportunity to correct any of the summary statements. The notes received from the moderators and recorders are fully reproduced in Section 3 of this report and are summarized in Section 2.



MAUMEE STUDY SERIES PUBLICATIONS

The following list of the publications in the Maumee River Basin Study Series was made available on display tables at the entrance to each forum. Two sample copies of each document listed were also available for public review at these display tables.

MRB Series	Date	Subject
1	April 1974	Plan of Study
2	March 1975	CAC Tentative Goals and Objectives
3	August 1974	Level B Study–Public Information Brochure
4	August 1974	Interim Report–A Presentation of First-Cut Planning
5	November 1974	Report on the October 1974 Public Workshops
6	NOT PUBLISHED AS YET	
7	January 1976	Alternative Plans for Public Action
8	NOT PUBLISHED AS YET	
9	August 1975	Baseline Reference–Preliminary Report Agricultural Sector Environmental Sector Toledo Urban Sector Fort Wayne Urban Sector Environmental Baseline for Maumee Bay
10	October 1975	Land Use Technical Paper–Preliminary Report
11	September 1975	Erosion and Sedimentation Technical Paper–Preliminary Report
12	January 1976	Water Quality Technical Paper–Preliminary Report
13	December 1975	Fish and Wildlife Technical Paper–Preliminary Report
14	October 1975	Outdoor Recreation Technical Paper–Preliminary Report
15	September 1975	Flood Plains Technical Paper–Preliminary Report
16	October 1975	Water Supply Technical Paper–Preliminary Report

Detailed programs, costs and impacts of programs were available at all January 1976 Public Forums in two volumes:
Volume I – Environmental Quality Alternative–Impact Analyses
Volume II – Economic Development Alternative–Impact Analyses

Maumee-Basin Plan Guidelines Offered By U.S.

Study Says Achieving Ultimate Environmental Quality Could Cost Over $1 Billion In 15 Years

Achieving the ultimate in environmental quality for the Maumee River basin could cost more than $1 billion over the next 15 years, a federal study has concluded.

In addition, the study says the annual maintenance costs for development of land, water, and agricultural resources could cost another $141 million a year.

The study was authorized three years ago by the Great Lakes Basin Commission (GLBC) as part of an overall resource plan for the entire Great Lakes area.

Guidelines for the Maumee River plan will be released at a public forum at 7 tonight in the college hall-lectorium at Owens Technical College, 30335 Oregon Rd. The meeting is one of eight being held in Ohio, Michigan, and Indiana.

Following the public forums, a final plan will be prepared to guide governmental units in meeting the anticipated needs for water and related land resources during the next 25 years, Eugene Jarecki, study manager, said.

Makes No Recommendations

The study makes no recommendations for sources of funds, but some new facilities, such as sewage treatment plants, would be financed by federal, state, and local governments.

The $1.5 million authorized in 1973 by the basin commission was the fourth such river area survey in the country.

Survey crews, working out of GLBC headquarters in Ann Arbor, Mich., held several public sessions obtaining opinions of the public, governmental agencies, and planners.

The survey explores three alternatives — continuing the present limited planning by state and local governments on a largely uncoordinated basis, an alternative emphasizing economic rather than environmental development, and one emphasizing environmental quality.

The final plan, to be recommended to the President and Congress, is to recommend the levels of governments and agencies best suited to implement the plan.

Topsoil Losses From Erosion

The survey concludes that maintenance of present programs would result in more high topsoil losses due to erosion, flood damage to low-lying areas and the Lake Erie shoreline, continued failure to achieve higher water quality, and continued inadequate facilities for hunting, fishing, and outdoor recreation.

The economic development plan would mean some environmental improvement, but to a lesser degree than the more expensive environmental alternative.

The economic alternative would have a price tag estimated at $739 million, with an average annual cost of $101 million.

Divided into eight components, the environmental alternative suggests the following plans, with estimated 1990 costs are as follows:

LAND RESOURCE MANAGEMENT

Develop a master plan by county as guidelines for the best uses of land. Acquire 29,900 acres which would be protected from urbanization and development. Begin erosion control programs on 4.3 million acres (of the basin's 5.7 million total acres) consisting of contouring, permanent cover, and grassed waterways. No acquisition cost estimates were made.

Require crop rotation and minimum tillage to reduce erosion, and stabilize 369 miles of stream banks by installing protective revetments and matting.

Reforestation and erosion control for 102,750 acres, and institute urban erosion control programs, especially at construction sites.

The survey estimates that these conservation measures would reduce erosion along waterways by 6.9 million tons of silt per year, and by 601,000 tons into Maumee Bay. This represents a reduction of 47.5 per cent of the present silt load entering the bay.

Estimated capital cost: $39 million, with $3.9 million average annual cost.

WATER QUALITY

More than $1 billion required for treatment of both municipal sewage and storm water, with no estimate given for treatment of industrial wastes.

The estimated $269 million cost for municipal treatment would provide a level of treatment necessary to support sport fishing in all streams in the basin. It would require $764 million to retain and treat storm water, and total estimated annual costs for both categories would be $114 million.

Develop 151 public fishing and boating sites in the basin, at a cost of $1 million, and $100,000 annual maintenance.

WILDLIFE AND HUNTING

Institute an incentive program to provide year-round access to private lands to preserve wildlife habitat; to provide open space and esthetic areas, preserve woodlands, and providing limited hunting. No acquisition cost estimates were made.

The study estimates that 200,000 acres could be utilized in the wildlife habitat and open-space program. The land would be tax exempt as an incentive for private owners to participate.

Initiate a public-access hunting program, with payments to landowners. About 1.5 million acres would go into the program. Average annual maintenance and incentive costs: $4 million.

OUTDOOR RECREATION

Purchase, develop, and maintain 35,100 acres for 70 outdoor recreation areas, of which about 5,600 acres in 9 sites are already in public ownership, but not fully developed. Most of this consists of low-productivity lands, floodplains, and woodlands.

Study the St. Joseph, Maumee, and St. Marys Rivers for possible inclusion in Indiana's natural, scenic, and recreational rivers program, and the lower Tiffin and the Auglaize Rivers for possible inclusion in a similar program in Ohio.

(The Ohio department of natural resources has designated 53 miles of the Maumee in Henry, Wood, and Lucas counties as a recreation river. Another 46 miles in Paulding and Defiance counties was designated a scenic river.)

Such designations could open the door for federal and state acquisition and development funds.)

Capital costs were estimated at $116 million, with annual maintenance and operations of $15.4 million.

FLOODING

Institute flood plain management programs, consisting of flood plain legislation restricting building in such areas, flood insurance, and regulating use of flood plains.

Continued

Toledo Blade, 1/15/76

Studies should be made outlining areas susceptible to severe floods, or those occurring an average of once every 100 years. Legislation should then be drawn regulating development within these areas.

Special emphasis should be given flood-prone areas of Decatur, Ind., Brunnersberg, Evansport, St. Marys, Gilboa, Findlay, Oakwood, Ottawa and Grand Rapids, O., and the south shoreline of Maumee Bay.

Federal and state "channelization" projects proposed for the Little Auglaize River, Middle Branch, and Prairie-Hoaglin ditches would not be implemented, the study said.

No capital costs were estimated, but enforcement costs and plans should amount to about $1.5 million annually.

MAUMEE BAY

Discourage further economic expansion carried out at the expense of the bay environment. This includes any bridges, dredgings disposal areas, a ban on commercial fishing, and channel deepening.

New spoil sites for ship channel dredgings should be found on land. Additional disposal sites should cost $18 million, with annual costs of $1.2 million.

Recommendations Made For Three-State Area

The commission report makes specific recommendations for land acquisition, flood control projects, and clearing and cleaning of streams in the 14 Ohio counties within the basin, along with areas of Michigan and Indiana in the 6,600-square-mile drainage area.

In Lucas County, the report recommends a permanent flood protection project at Point Place in Toledo.

As part of the environmental alternative, 19 outdoor recreation sites totaling 10,900 acres should be acquired. Twenty-one access sites on streams and along Maumee Bay should be acquired for fishing and boating, 10 of which would be in conjunction with outdoor recreation sites.

Flood plain management programs should be encouraged, and all sources of pollution, including siltation and erosion, should be eliminated in the basin's most populous county.

Incentive programs for open space and wildlife preservation should be adopted on 17,200 acres of private land and incentive public hunting programs should be developed for 137,000 acres of private land.

Other recommendations included in the report, by county, are:

ALLEN: Acquire 1,500 acres for public hunting; clear and remove obstructions from sections of the Ottawa and Auglaize rivers.

PUTNAM: Build flood control project at Ottawa, O.; clear segments of Auglaize and Ottawa rivers.

HANCOCK: Acquire 1,500 acres for public hunting.

HARDIN: Acquire 1,000 acres for public hunting.

AUGLAIZE: Clear and remove obstructions from segments of Ottawa and St. Marys River.

VAN WERT: Acquire 2,000 acres for public hunting.

MERCER: Acquire 2,000 acres for public hunting, clear sections of St. Marys River and Twelvemile Creek.

WILLIAMS: Clear St. Joseph River and east branch of the river to Michigan-Ohio line, Acquire 1,000 acres for public hunting.

FULTON: Acquire 2,500 acres for public hunting, clear Tiffin River and branches, and Mill Creek.

DEFIANCE: Acquire 2,000 acres for public hunting.

HENRY: Clear Turkeyfoot Creek and south branch.

PAULDING: Acquire 2,000 acres for public hunting.

The report recommends acquisition of 3,000 acres in the Maumee basin in Indiana, for use as public hunting areas; construction of a flood control project at Fort Wayne, and clearing of Cedar Creek north of Fort Wayne.

In Hillsdale County, Michigan, 1,500 acres should be acquired for public hunting, the report recommends.

Groups Participated In Report Preparation

Clear Water, Inc., a nonprofit citizens' coordinating agency for the Maumee basin, was a part of the citizens advisory committee, which aided the GLBC staff in preparation of the report.

Other groups included the American Association of University Women, Toledo-Lucas County League of Women Voters, Izaak Walton League, Lake Erie Wildflowers, and the Toledo-Lucas County Port Authority.

Maumee River public forums are rescheduled

Maumee River Basin Level B Study public forums scheduled for November in Michigan, Indiana, and Ohio have been rescheduled for January 1976.

Forums on alternative plans for the future management of the water and related land resources of the Maumee River basin were postponed by the study's Planning Board, which found it could not have alternative plans ready to present in time for November forums.

Led by the Great Lakes Basin Commission, the two-year study involves representatives of the public, regional planning groups, and state and federal agencies. Following public forums on the alternative plans, a final plan will be drawn to reflect the preferences of basin residents.

This final recommended plan to provide for needs into the next century will be submitted to Congress and the Executive Branch in 1976.

Ohio forums will be held: Jan. 12 at Marsh Foundation, Van Wert; Jan. 13 at Ohio State University, Lima; Jan. 14 at Findlay College, Findlay; Jan. 15 at Owens Technical College, Perrysburg; Jan. 21 at Defiance College, Defiance; and Jan. 22 at Napoleon High School, Napoleon.

Maumee Basin forum today at I.U.-Purdue

Alternative ways to meet the needs and problems of Maumee River Basin land and water resources will be discussed at a public forum today at 7 p.m. in Room 222 of the Student Union Building, Indiana-Purdue University Fort Wayne.

The forum, to be conducted by the Maumee Citizens' Advisory Committee, is part of the Maumee River Basin study sponsored by the Great Lakes Basin Commission. After presentation of the various plans, those attending will be divided into groups which will review and comment on the plans.

River forum at Napoleon

One of a series of eight public forums conducted by Great Lakes Basin Commission is scheduled for Napoleon High School this Thursday evening at 7 o'clock.

The general public is invited to the forum which will be centered on five moderators, Herb Salsbury, Robert Cole, William Hensley, E.G. Vorwerk and David Reed.

Coordinators for the Napoleon forum are Frank DuByne and Agnes Hooley.

IT IS THE objective of the forum to serve two purposes. First, to serve as a means to educate those attending about the efforts of the commission and the Maumee River Basin Level B Study. Secondly, to give those attending an opportunity to express their opinions.

Discussed will be the environmental and economic development of different aspects of the basin such as water quality, wildlife and hunting, erosion, flooding and recreation and fishing.

THE NAPOLEON forum is the 7th in the series which included meetings in Van Wert, Lima, Findlay, Perrysburg, Ft. Wayne and Defiance. Following the Napoleon forum, an 8th meeting is set for Adrian College on January 27.

The Defiance meeting is scheduled for this Wednesday evening at the same time at the college's Dana Hall.

Toledo Blade, 11/19/75; Ft. Wayne Journal Gazette, 1/20/76; Napoleon Northwest Signal, 1/20/76

Forum Considers Maumee Basin Improvement

BY STEVE PHENICIE
Daily Telegram County Editor

Alternative plans for improving the Maumee River basin were considered at a public forum last night at Adrian College.

Although about 80 percent of Lenawee County is in the River Raisin watershed, the rest of the county falls into the Maumee River basin. This includes a portion of the southeastern part of the county, mostly in Riga Township, and a western portion of the county running roughly from Devils Lake to Morenci.

The Great Lakes Basin Commission, composed of representatives of the eight Great Lakes states and 12 federal agencies, is responsible for coordinating planning among units of government concerned with water and related land resources in the Great Lakes Basin.

Maumee study participants include representatives of Michigan, Indiana, and Ohio. From discussions held in public forums throughout the river basin, information has been gathered for a workshop to be held Feb. 6 and 7 between planning representatives and the citizens advisory committee of the study.

These people will come up with a final rough draft for a plan which will go to public hearings will be incorporated into a final plan.

Art Brewer of Morenci, chairman of the citizens' advisory committee, stressed last night that implementation of the plan must be accomplished by local units of government.

The study, as it now stands, proposes two alternative plans for improving the Maumee River basin, one with emphasis on environmental quality and the other on economic development.

It was stressed that neither alternative will probably be adopted totally. Instead, the final result will probably fall somewhere through the two. A third alternative would be to continue present programs although this probably would not be as effective in solving water quality problems.

The environmental quality plan for the river basin in Michigan, costing an estimated $5,633,800 annually (in 1975 dollars), emphasizes guiding development, especially on inland lake shorelines and along streams, in a way minimizing impacts on water resources.

It would accelerate sheet erosion control on 549,800 acres of cropland needing treatment, on 24,100 acres of pasture, and on 20,500 forestland acres, as well as an incentive program for grass strips along all water courses.

Other features of this plan are:

—Treat all wastewaters from municipalities, industries, and urban storm runoff and control nonpoint sources of pollution.

—Provide incentive program to preserve wildlife, open space, and woodland on 26,300 acres of private land. It would also have an incentive program for public access for hunting on 226,000 acres of private land.

—Public acquisition, development, and maintenance of five outdoor recreation sites totaling 5,200 acres, of which 2,000 acres are already publicly owned.

—Urban and rural flood plain management programs consisting of flood plain legislation (in areas not covered by state permit authority), flood insurance, flood warning signs, and public education.

The economic development plan features are:

—Promoting economic return on public and private land resource investments through efficient use of current and planned public services and facilities.

—Accelerate erosion control on 20,500 acres of forestland, stabilize and revegetate 101 streambank miles, and institute an incentive program for grass stips along all water courses. Attempt to meet food and fiber demands without changing conventional practices or increasing sediment yield above current levels.

—Treat wastewaters from municipalities, industries, and storm runoff from the larger cities.

—Incentive programs for wildlife, open space, and woodland preservation on 13,200 acres of private land. Public purchase, development, and management of 4,500 acres of land primarily for hunting. One existing public hunting preserve would be expanded.

—Public acquisition, development, and maintenance of eight outdoor recreation sites and development of access sites on streams and lakes for fishing and boating.

—No flood plain management over existing levels is considered in this alternative.

Some of the ideas expressed by discussion groups at last night's meeting were:

—More long-term planning is necessary.

—There is a need to get responsible and knowledgeable elected officials involved in the planning process.

—Farmers shouldn't be deprived of the right of fall plowing.

—Local ordinances should be used to implement a plan.

—Incentives are needed through tax breaks to implement portions of the plan.

—There's no easy answer to flooding problems.

—It is generally better to compensate farmers for permitting hunting on their land rather than buying public land.

—Nature areas, such as the Bean Creek Nature Sanctuary, should be included in the plan.

—Construction on flood plains should be avoided.

2
SUMMARY OF THE FORUMS

This section summarizes the work-group discussions in the eight public forums and reorganizes them according to resource issue categories. It follows the same resource issue categories used to organize the components of the alternative plans. These categories are land resources management, erosion and sedimentation, water quality, water supply, fish and wildlife, outdoor recreation, flooding and drainage, and Maumee Bay.

The summary in this section is based directly on the notes of the work-group moderators and recorders, which are printed in full in Section 3. The comments and analyses should not be construed as the official position of the Maumee Study or the Great Lakes Basin Commission, but rather as a staff effort to summarize and interpret the discussion, statements, and opinions expressed by those reviewing the alternative environmental quality (EQ) and economic development (ED) plans. Although an effort was made to stress the major issues raised at the forums and to present the essence of all the discussions, it was impossible to cover completely all conflicting and diverging views in this limited summary.

This summary does not distinguish between views expressed by only one individual and views expressed by many individuals, representatives, or groups, since this distinction was not always made in the recorders' notes. An asterisk (*) after a particular point of discussion indicates the number of times that point was repeated during the entire series of forums. For example, if two asterisks follow a statement, then that idea (or one similar to it) was expressed a total of three times during the eight forums. The tabulated results of the basinwide questionnaire (given in Section 4) provide a somewhat more precise quantitative representation of public views on the Maumee alternative plans.

LAND RESOURCES MANAGEMENT

Most groups agreed that there was a need for planning in the Basin to preserve prime agricultural lands and to prevent improper development practices. Emphasis was also placed on wise planning to insure that land is used for its best potential.

Measures suggested to control the use of land in the Basin included:

- strong county control to prevent leap-frog growth
- education of the general public and elected officials**
- tax incentives (land or income)**

Study Manager Gene Jarecki answers questions at the Maumee Public Forums.

- locally controlled zoning boards and ordinances***
- transfer or purchase of development rights (if there are safeguards to prevent county commissioners from tampering with this system)
- financial incentives for conservation practices aimed at the agricultural and development community
- fair taxation to farmers near urban areas*
- close coordination of land planning and planning for services
- easements
- reasonable land capability studies in the planning process.

On the negative side, one group felt that "the physical capability of land for development is not a constraint in the Maumee River Basin as most of the land is developable. Land that is prime for agriculture is also prime for housing development. Use of land capability analysis may have limited value in developing a land resource management plan. It is more apropos to areas with a lot of natural hazards."

Concerning the concept of Transfer of Development Rights (TDR) the following points were made:

- TDR provides for development, but guides it into the most suitable areas.
- The system is equitable since people can buy and sell development rights—this is a form of compensation in zoning decisions.
- To implement TDR, a good strict zoning ordinance is needed, based on land capabilities, services, etc.
- Density zoning is easily handled through this concept.

Land use and the effects on open space were discussed:

- Toledo was behind the recommended ratio of population to open space 10 years ago. How far is Toledo currently behind?
- Open space earmarked in locally adopted plans has been developed.
- Should one open area be sacrificed to save another, or is too much land being grabbed up overall?
- Was the acquisition of prime agricultural land along the Maumee River near Napoleon for Turkey Foot Rock Park a wise decision regarding open space?

Prime agricultural lands were discussed at the forums. Preservation of good agricultural land was felt to be both economically and environmentally beneficial. It was felt that prime agricultural lands should be kept in production, while less-than-prime agricultural lands should be used for recreation.

Other comments relating to land resources management were:

- Land use regulation can be a protection, depending upon how it is construed.
- Van Wert County needs 100 percent crop production.
- A high level of agricultural production should be maintained.
- A farmer must be able to make a living. If he is forced out of farming he will sell to the highest bidder.
- Whatever is done, it should be possible for farmers to afford to keep farming in the Basin.
- There is more growth in rural areas as people leave the larger cities.
- Through agricultural zoning, farmers have more to lose than city dwellers, since farmers would not be properly compensated for their land.
- Farmers should be allowed to land speculate and there should be tax incentives available to encourage land to stay in agriculture.
- Farmers and large landowners should not have to pay sewer and water assessments if they do not benefit from the improvements. The efficiency of these services decreases as they are extended.
- Where should new development go—in redeveloped urban areas or in former rural areas?
- Large land purchases by government to gain control of land are frightening, but may be OK if the land was not being properly cared for. One obstacle to government ownership of land in the Basin is the high cost of land.
- Overall it was difficult to make a judgment with the available information.

Concerning the text of the Land Resources Management components, it was felt that statements such as "emphasizing the

Jane Dustin (right), CAC member, was part of the first work group session at Ft. Wayne.

guidance of urbanization" and "stressing efficient use of" are pretty weak phrases. Some participants felt that there was a need for a more positive and specific approach to each one of the plans. There is a need to spell out and elaborate upon specific proposals dealing with economic incentive programs, programs for controlling the spread of urban development onto prime agricultural lands, land management and conservation programs, and enforcement of these programs.

General feelings about the EQ (environmental quality) and ED (economic development) alternatives presented were:

- It was widely felt that a final plan should be economically feasible.
- One work-group vote yielded 75 percent for EQ and 25 percent for ED.
- Another work-group vote yielded: 5 for EQ, 4 for ED, and 1 for "continuing present programs."
- It was felt the ED plan would require a lot of planning, especially at the local level, but would allow the individual to keep his land rights.
- The EQ approach to land management was felt to require a trade-off of local control for a regional approach.
- A need was expressed for compromise and for reasonable balance between the two proposals.*
- It was stated that the best plan may include parts of both the EQ and ED alternatives.
- Both plans were believed to require considerable legislation and to concern more densely populated areas.
- All the issues in the study were considered to be connected to land use control. To solve many of these problems, workable and locally administered land use regulations were thought necessary.*

EROSION AND SEDIMENTATION

The discussion of tillage practices was a major focal point concerning erosion and sedimentation at most of the forums. Comments favoring minimum and no till operations pointed out the following benefits:

- less soil erosion and sediment delivered to waterways*
- overall fuel savings in crop production*
- overall land and soil preservation*
- water quality improvements
- no loss in productivity.

Comments opposing minimum and no till operations were:

- Heavy soils would not be suitable for minimum and no till operations.*
- Greater applications of herbicides and pesticides are necessary, increasing the cost to the farmer.
- Farms having soils both favorable and unfavorable to minimum till operations would be in a difficult position.
- A loss in farm productivity could result from these practices.
- The cost of changing equipment over to no till operations on a basinwide scale would be considerable.

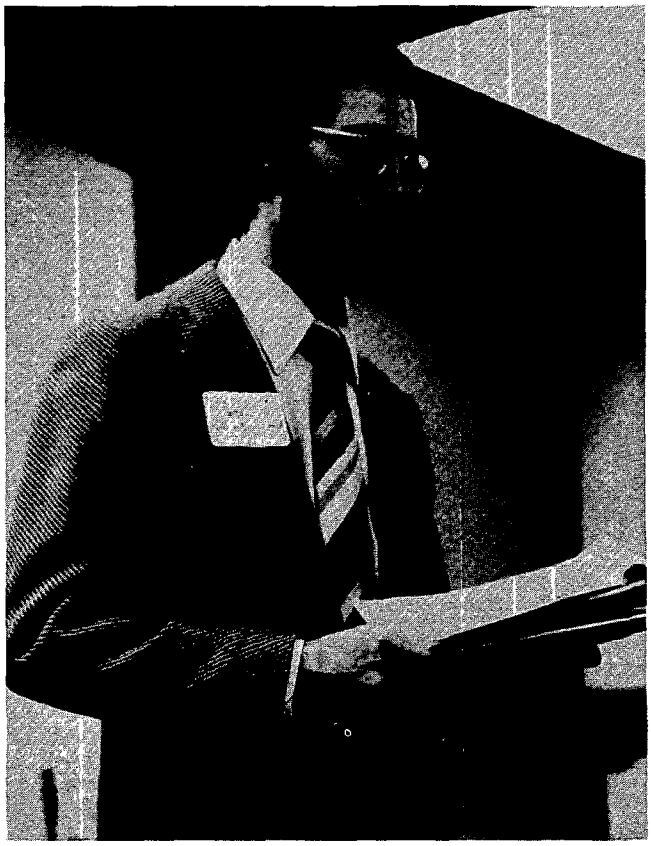
Other comments relating to tillage practices in the Basin were:

- The larger farmers are more ready to go to no till practices.
- Some areas are not ready for no till operations yet, but would consider minimum till operations.
- It would take time for farmers to convert to no till farming methods.
- Fall plowing is a function of soil types, slopes, size of the farming operation, and management practices.
- Allow fall plowing in areas where it is needed, but get farmers to leave a mulch residue on the surface.

Conservation practices other than minimum and no till operations were also discussed:

- Farmers should be using grass filter strips.*****
- Larger farmers are ready to set aside more grass areas than are smaller farmers.
- The availability of information has increased good farming practices in some areas of the Basin.

Robert Arnold (center), CAC Vice-Chairman, attends a discussion group.



Gil Latz, from the Allen County Planning Commission, moderates a work group session.

- Productive gains made through good farming practices have also increased their use.
- All should use proven conservation practices in farming.
- Erosion and sedimentation programs must be complete and comprehensive to be most effective.
- Farmers, rather than legislators, should be listened to when it comes to erosion control.
- Farmers do not want to be forced into making cropland changes.
- Grassed waterways should be encouraged.
- Vast improvements have been made through the use of outlet structures and grassed waterways.
- Crop rotation, with deep-rooted legumes planted for one year of the rotation, would improve soil structure and drainage.

Most groups offered suggestions for implementing conservation practices on farmland:

- Additional money is needed to accelerate the implementation of existing USDA programs.
- Incentives and education are needed to encourage installation of grass filter strips.**
- Farmers should be compensated by tax breaks or other means for lost production due to practices such as grass filter strips.
- ASCS program monies are a source for funding conservation programs.
- Intensive education about the programs is needed.
- Success of any program will depend on the individual farmers. Management is a big factor.
- Long term agreements are useful to insure perpetual upkeep of conservation projects constructed with governmental assistance.

Other general comments on erosion and sedimentation were made:

- Ditch bank erosion is a major type of erosion in flat farmland areas.
- Erosion problems in forested areas were questioned.
- Sediment problems should be solved at the source.
- There is a need to maintain the natural soil structure.
- The Federal government is telling the farmer to produce more, while at the same time abolishing conservation incentive programs.
- There is a need for long term conservation incentive programs similar to those that existed in the past.
- There was some confusion in one forum group between the written and oral presentations regarding erosion and sedimentation.
- More public input into the Level B programs is needed.
- It is difficult to make a judgment given the facts and background presented.

The following summary comments were made in regard to erosion and sedimentation:

- It was felt that a final plan must be economically feasible.
- The EQ and ED plans were thought capable of working together in the best interest of all concerned.
- Some felt that even though the ED plan has a greater short term economic advantage, the EQ plan will prove to be most advantageous in the long run.
- The EQ approach was considered acceptable, if good drainage is included.
- One group agreed that a better program of erosion and sedimentation control should be initiated.
- Another group "applauded and backed" the EQ plan, provided that incentives for compliance are part of the plan.
- One work-group vote yielded: 7 for ED and 1 for EQ.

WATER QUALITY

Point sources of water pollution were discussed in a number of groups. The following comments were made:

- It is important that all municipal waste volume is treated and that overflows do not occur.
- New approaches to sewage treatment are needed, especially for individual-type systems where septic tanks are now being used.

All urban homes should have adequate treatment and be part of a regional system.

In order to comply with water quality standards, an industry or municipality may end up returning cleaner water to a stream than it takes out. If this is the case, closed or water reuse systems would be a logical alternative. The streams would then take care of themselves.

- Due to inadequate knowledge of area streams, cost burdens for water quality are exorbitant on some communities.

Storm water treatment was briefly discussed. Differing opinions on the treatment of storm water were presented in one group. Other groups noted that:

- To comply with P.L. 92-500, some storm water would need treatment.
- Black snow in the cities indicates a need to treat urban storm flows.
- Storm water does not need to be treated to the same extent as municipal waste water.
- New urban area developments have a great effect on water quality.

Many groups realized the impact of nonpoint pollution sources other than urban storm water, and expressed what they felt to be major or minor causes of the problem:

- Nonpoint sources are the biggest polluters in the Basin.
- Overuse of fertilizer in some areas is causing water quality problems.*
- Air and water pollution from small feedlots is insignificant.

Means of solving the nonpoint-source problem were offered by the groups:

- The worst offenders must be identified and controlled so all farmers are not blamed.
- It is most important to control erosion and sedimentation.**
- Improve water quality at the source by promoting less intense cropping rotations and minimum tillage.
- To prevent soil and fertilizers from entering streams, the following methods can be used: sod waterways, field windbreaks, erosion control structures, special farm management, minimum tillage, grass strips, permanent pastures, and correct fertilizer applications (according to time of year and soil characteristics).*
- Some felt fertilizer runoff could be halted by knowing and using the best application methods. (Others felt it could not be halted.)
- Stringent regulations controlling feedlots are not desirable.

Suggestions and cautions for implementing nonpoint-source controls were given:

- Provide incentive programs and improve drain laws to promote grass strips.
- The person benefiting downstream should help pay the farmers' cost through tax exemptions for land tied up in conservation practices or through payments to compensate losses in yield.
- These programs should be accomplished without economic loss to the farmer.
- The EQ plan is preferable, but the controls should be reasonable enough to live with and representatives of nonpoint-source polluters should have a voice in setting standards.
- Farmers are more likely to comply through incentives and education than through legal mandates.

Current Federal water quality legislation, the 1972 Amendments to the Federal Water Pollution Control Act (P.L. 92-500), and their enforcement were discussed:

- The water quality alternatives presented are a sellout of P.L. 92-500. The costs are not high enough, especially for the ED plan.
- It is important that the zero discharge goal for 1985 of P.L. 92-500 be met.
- Present pollution control laws are not being adequately enforced; they should be stringently enforced. EPA should give more citations to polluters.*
- Spot checks on industry and better monitoring are needed both day and night.
- Equal regulation should be applied to all dischargers—municipalities are required to test effluents and have licensed operators; all private installations should have the same requirements.
- Improvement in the administration of Federal water quality grants is needed.
- Industries will be cleaned up by 1985, but municipalities will not be.
- P.L. 92-500 will probably not be met because of the fantastic costs, even though the technology is available.

Becky Meier, CAC member, and Robert Arnold, CAC Vice-Chairman, participate in a work group session.

Other comments made relating to water quality were:

- Five-acre lot subdivision regulations should be revised and strengthened to prevent water quality problems from these areas.

- Most water quality goals of the CAC were not included in either alternative. They should be included.
- It is important to do as much as possible to improve water quality because the cost of materials and labor is rising rapidly.
- Equity of payment to solve water quality problems is important.
- If Toledo area rivers are cleaned up, life will return to them.
- Wastewater treatment is expensive: Van Wert spent $2 million on a tertiary plant and $5 million to separate their sewers.
- The ED plan to attain State water quality standards by only controlling point sources of pollution is wrong.
- Water quality is tied to land resources management and all the other issues presented in the study.
- Communities should treat their own sludge and not send it to the next county.
- Recycling sludge for fertilizer use should be considered.
- The quality of Maumee River water should be improved for health reasons and for recreational use. We should have a 50 percent reduction in sedimentation and have the fecal coliform and chemical discharges from industries and municipalities reduced.
- Everyone should carry their fair share when it comes to public involvement.
- Improving water quality will encourage fishing and recreational activities.
- All stream characteristics must be scrutinized so that all are aware of the most effective control costs and methods.

General conclusions about the water quality of the Basin were:

- One work group favored the ED plan.
- Two work groups favored the EQ plan because the higher levels of water quality would be more consistent with other desires.
- Two work groups felt that the selected plan should be a compromise of EQ and ED.
- The 1985 goal of P.L. 92-500 was favored by some to attain a clean environment.
- One work group felt that overall the goals of the farmers, developers, and environmentalists are the same. All want good water quality. Farmers want to preserve their topsoil, environmentalists want them to keep it.

OUTDOOR RECREATION

Groups discussing the need for additional recreation facilities expressed widely varying views:

- Facilities in the Bowling Green area are presently under heavy use.
- There is a definite need for increased recreation opportunities in the Van Wert area.
- We have to plan for recreational use by future populations.
- There is disagreement concerning the acquisition of more land in the Toledo area for recreational use.
- There is a difference in needs, based upon time availability, between city residents and county residents. Needs should be based on these two scales.
- It is difficult to see the need for additional recreation areas and facilities.*

Suggestions for future recreation acquisition and development were given:

- More camping facilities are needed in the Napoleon area. This type of recreation would enhance economic development.
- More and better docking facilities are needed.
- The use of farm ponds to provide rural recreation should be considered.
- Public access to recreation areas should be increased.
- Route 24 could be made into a scenic highway. This would require an enforced low speed limit, a ban on truckers, and some overlook areas.
- Bikepaths along old towpaths, railroads, and highways should be increased.
- There is a major need to preserve existing natural areas, but there is concern over taking this land out of agriculture.*
- Power boats on streams and rivers might increase bank erosion. Increased stream access should be for unpowered boats.
- School recreation facilities should be made available for use by the public during the summer.

Some general comments on recreation were made:

- It was a good decision to acquire the land for Crane Creek State Park and the Ottawa National Wildlife Refuge, rather than to let it be developed.
- A change in attitude about recreation and the environment in general is needed. It seems that now these programs are last to receive money and first to have it taken away.
- No agreement was reached in a discussion on whether $10 per capita per year is a good amount to spend for recreation.
- Recreation is a necessity, but the term should be used more carefully.
- The term "recreational river" is undesirable because "recreation" has a negative connotation to riparian property owners. The terms "conservation" or "preservation" would more realistically convey this concept.
- Passive recreation is also a need.
- The private sector will only operate recreation facilities when a reasonable profit is involved. The public sector must be involved to provide opportunities for open space, hiking areas, woodlands, etc.*
- Are boat ramps needed on the Maumee?
- Limited clearing and snagging would be a benefit to canoeists.
- Development should be carefully planned for recreation at a few sites which can be properly supervised.
- Natural areas can be destroyed by too much development.
- Neither plan meets swimming needs to a significant extent.
- If it came to a choice between putting public money into recreation or spending it on such areas as erosion, sedimentation, and water quality, then provision of recreation should be left to the private sector.
- Recreation should be left to free enterprise entirely.

General feelings that some groups had about the plans were:

- One work group preferred the EQ plan over the ED plan be-

Land resources management and erosion and sedimentation work groups discuss specifics.

cause they felt that natural areas should be preserved for outdoor recreation. They felt that wildlife areas and the few natural areas remaining should be purchased and preserved for our children's future. It was also felt that the EQ plan would provide a more varied assortment of recreation.**

- One work group tended to favor the ED plan for recreation which they felt provides for intensive use of our resources to satisfy recreation needs.

FISH AND WILDLIFE

In regard to public hunting, safety and hunter behavior were regarded as problems to be dealt with. The following opinions were expressed:

- Hunting should be restricted around highly populated areas because it is a safety hazard.
- Hunters present a major behavior problem.
- More people are posting lands to prevent hunting as a result of the public abuse of land.
- There have been people problems on State lands where there was not proper supervision.

Both public purchase of land and incentive programs aimed at private landowners to allow hunting were debated. Concerning the public purchase of land it was remarked that:

- Public hunting areas should run parallel to and include the flood plain areas of rivers they are near.
- Costs for public purchase programs for hunting seem high, because the income to the public agency from lease-back to agriculture has not been considered in the total costs presented.
- Farmers are overburdened with hunting pressures; public land acquisition will only relieve some of this pressure, but will not increase wildlife.
- The large amount of private land for public access is questionable.
- Purchase and management of public hunting land is not desirable because not as much land would be provided for hunting as would be provided by the incentive program; because the management may be under political influence which would affect the quality of hunting; and because public lands do not provide all-around high quality of hunting environment.
- Who will purchase land for public hunting? Will farmers and other landowners have their land taken away for hunting?*

The incentive approach to satisfy public hunting needs was also discussed:

- Government should offer landowners tax incentives to allow hunting.*
- The incentive program is preferable because it has previously worked so well in Michigan and because the landowners also like it.
- The incentive program would give hunters more for their dollar.
- If an incentive program was set up, people allowing hunting for free now would also want to be paid; therefore you would have additional costs without receiving any gains for the hunter.

There were also a large number of comments made relating to preserving wildlife habitat and wildlife for its own sake:

- Fall plowing and other practices have reduced wildlife.
- Too much wildlife habitat is being lost because there is not enough money to purchase significant areas.
- If habitat does not increase, neither will wildlife.

- Landowners should be offered incentives financed by the whole of society for habitat preservation.*
- Farmers must be encouraged not to destroy habitat such as hedgerows, ditches, etc.*
- Further channelization of rivers and streams was not thought to be advisable.
- Existing woodland should remain woodland, with incentives provided to encourage its preservation. These incentives should be in addition to the present law which allows a 50 percent tax reduction for declared preserved land.*
- Do not mow cloverlands or edges of highways, and encourage natural plantings in these areas for wildlife.
- Areas along rivers and creeks are best for wildlife; cooperation is needed to preserve these areas for wildlife.
- The EQ approach for wildlife preservation should be followed.

However, some people attending the meetings felt that there was enough wildlife cover in the Basin, that habitat was actually increasing (contrary to what wildlife people say), and that deer populations were increasing in the Basin.

Group discussions also centered on the fisheries of the Basin:

- Because of poor water quality, fishing in the Auglaize River is limited to carp.
- Channelization would have adverse effects on the natural spawning areas of Northern Pike in the Tiffin River.
- River and streambank planting would reduce erosion and sedimentation.
- There should be a high emphasis on the need for increased fishing areas.*
- More consideration should be given to fish stocking in PSA 3.
- Fish ladders should be included at dams, regardless of the program implemented.
- Farm ponds should be considered to provide fishing needs.
- Present fishing access sites leading to poor areas are unused; others are greatly overused. This should be considered in the fishery access site plan.
- Fewer areas should be kept up due to extensive costs of policing and up-keep.
- The EQ plan will help fisheries.
- The ED plan would provide no help to the Basin's fisheries.

General comments concerning both fishing and wildlife were:

- One work group was undecided about clearing and snagging.
- Concern was expressed over how the Level B plan is being coordinated with the plans of city and county planning commissions.
- It was felt that private interests should get more involved in these areas, and that when it comes to a choice between fisheries and wildlife problems and other problems in the Basin, the public's money should be spent on the other problems.
- One work group was concerned about the comparative costs of the various approaches and the incentive program.
- One work group favored natural areas and wildlife protection, but was against permitting access to hunters.
- One group felt the Bean Creek Nature Sanctuary (55 acres) to be extremely valuable because of several rare plants and a wide variety of trees, and this work group would strongly oppose any plan to alter the nature area.
- One work group suggested that parts of both the EQ and ED plans be used to formulate a plan to best serve the people.
- One work group totally supported the EQ plan, especially in terms of preserving natural areas and improving the fisheries of the Basin.

FLOOD PLAINS

Flooding problems brought out at the public forums included the following:

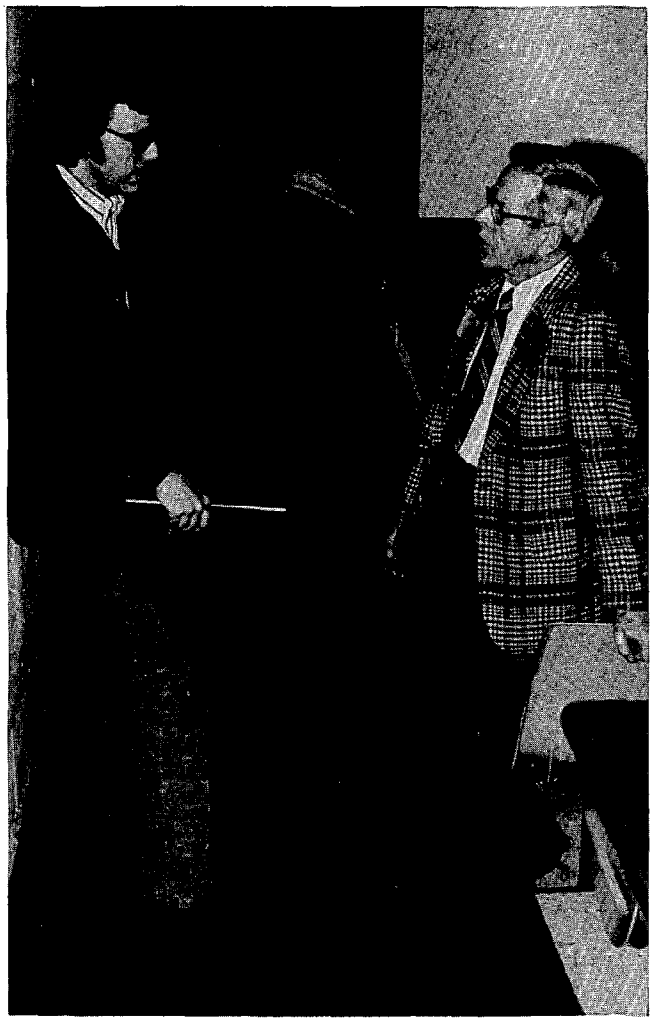
- St. Mary's Lake, because it is managed for recreation only, causes problems for agriculture downstream from the outlet.
- The stump problem in the Auglaize River is due mainly to dead elm.
- The Auglaize Power Dam near Defiance creates a large amount of backwater which causes flooding problems.
- Flood plain encroachment is a definite problem in the Van Wert area.
- Drainage in rural areas is the most important need and is required before any land management practice will benefit the farmer. You cannot grow plants without drainage.
- There is a serious flooding problem for some Ohio farmers along the Tiffin River, just south of the Michigan border. Sedimentation in this area has compounded the problem. Many tile drain outlets are buried.

Flooding along the Lake Erie shoreline of Maumee Bay was discussed:

- Even though evacuation has not been proposed for Pt. Place, it is doubtful if people living there would want to relocate.
- Would evacuation be the cheapest solution for Pt. Place?
- Land management of the Lake Erie flood plain should only allow uses compatible with flooding in the flood plain.
- Structural methods to control Lake Erie flooding are preferable.

Numerous structural suggestions to alleviate flooding problems in the Maumee Basin were given:

- Flood runoff from developed areas must be controlled with retention and detention basins. Parking lots could be used for this purpose.
- Interceptor ditches and sewers with sedimentation ponds would help to alleviate flooding problems in developed areas.
- Some form of channelization may help to solve the flooding problem along the Tiffin, but there is no easy solution.
- The Little Auglaize River Watershed project should be included in the plan since it is an approved P.L. 566 project.*
- The Auglaize River could provide many recreational opportunities if properly handled. Limited clearing and snagging would be sufficient to provide boating and swimming while preserving wildlife habitat.
- Creek flooding could be controlled through retention dams, holding reservoirs, clearing and snagging, and channel deepening and widening.
- In PSA 1, the EQ plan with the use of P.L. 566 projects is a good way to help the flooding problem—not only here but in



Art Brewer, CAC Chairman, discusses alternatives with an Adrian Forum attendee.

Ohio as well. Flooding along the Tiffin in Ohio is closely linked to problems of sedimentation.

- All projects should include a 15-foot easement along their length.
- Small ditches can be cleared locally, but cleaning help is needed on the rivers.
- Local governmental units should use all existing statutes and funding to correct ditch and stream flooding problems.
- Ditches should be cleaned at the downstream ends if they are cleaned at the upper ends.
- The Little Auglaize River Watershed project needs to be completed.
- Clearing and snagging is needed on the St. Mary's River to remove and prevent log jams.
- The Tiffin River should be cleared and snagged, but only debris should be removed without disturbing the banks or changing the channel.
- Flood control dikes and modified streambanks should only be sodded–trees and brush should not be allowed to grow in these areas.
- Town Creek must be cleaned out to minimize flooding problems and to allow efficient operation of Van Wert's drainage.
- Urban and rural flooding should be dealt with through structural methods first and then through nonstructural methods.

Nonstructural means to deal with the flooding problem were also elaborated upon:

- The flood plains need to be identified and all future construction in the flood plains should be prohibited. This will save money.*
- Preserve flood plain lands for recreation and open space.
- Flood plain zoning laws in Ohio, Indiana, and Michigan are not very strict. Wisconsin laws are a good model.
- Strong flood plain management through zoning should remain locally controlled. There is a great need for close cooperation among the many political subdivisions which control zoning.**
- Good land management must be practiced throughout the watershed to hold the water near where it falls.
- Flood plain management and the acquisition of undeveloped flood plains was recommended for Ft. Wayne.

Issues regarding Cedar Creek in Indiana were discussed at the Ft. Wayne Forum. (*It should be noted here that the map location for clearing and snagging under the ED plan for Cedar Creek as presented in the booklet should be located entirely within DeKalb County and not in Allen County.*)

- The data designating a portion of Cedar Creek as a possible area for flood damage reduction through clearing and snagging under the ED plan should be made public.
- Definitions of clearing and snagging and clearcutting should be further clarified in a film strip.
- Instead of putting money into structural flood control improvements on Cedar Creek, the money should be used to reimburse farmers for their losses. (It was noted that there is no legislation on the books to do this at the present time.)
- Most environmentalists fail to see flooding from an economic viewpoint as a threat to their jobs and income.
- Short- and long-term solutions must be separated when looking at the Cedar Creek issue.
- How important is a farmer's livelihood with respect to other people's needs to experience the natural world?
- Why was Cedar Creek not designated to be studied as a possible scenic stream in the EQ plan?

Other comments made regarding flood plains were:

- How are average annual costs for protection from flooding figured?
- Channelization projects in the past have not been acceptable.
- P.L. 566 channelization projects should not be implemented.
- Channelization ruins fish and wildlife habitat and does little if any good. The Little Auglaize River is an example.*
- If the lower Tiffin River was designated as a wild and scenic river, this would preclude any type of cleaning. Some cleaning should be allowed in this area of the river if the upper reaches are cleaned.
- We cannot continue to drain lands for the benefit of farmers

A work group discusses all components of the environmental quality and economic development alternatives.

and builders while injuring society. The benefits gained by these people will be paid for by all of society.

- Beneficial effects of good drainage far outweigh adverse effects associated with land use, erosion, and sedimentation.
- The Corps of Engineers can only clean rivers for flood control purposes, not for recreation.
- Costs increase tremendously as local agencies procrastinate in deciding what to do about flood problems.
- The Tiffin River has had channel work done on it from just below Morenci, Michigan, to the Ohio line.
- The EQ plan will require a lot of legislation, zoning, enforcement, etc.

General comments regarding flood plains expressed these views:

- One work group was totally against clearing and snagging Cedar Creek.
- One work group favored the ED plan, but felt that all streams should be kept open for agricultural drainage. (This includes clearing and snagging and removal of sediment when necesary.)
- One work group felt that both the EQ and ED plans to deal with flooding problems were extreme and that an intermediary approach to balance the two should be taken.

WATER SUPPLY

Only a few comments were made regarding water supply:

- The Northwest Ohio Water Development Plan was felt to be a good plan which should be implemented.
- It was felt that any future reservoir designs should incorporate provisions to include fish habitat.
- Montpelier already has an unused well available for future water supply and it was not expected that there would be any deficiencies there in 1990.
- Van Wert was thought to have a very good system for storing surface water and a sufficient water treatment plant.

MAUMEE BAY

Nearly all comments relating to Maumee Bay were made at the Toledo (Perrysburg) forum. Major areas of discussion concerned dredge spoil disposal and navigation, the Maumee Bay crossing, a Maumee Bay study, and commercial fishing.

Views expressed on dredging and commercial navigation were:

- There is concern over the intent to fill over 250 acres of the Bay bottom by the Corps. This Bay bottom land was given to the Port Authority by the State. Can this filling be stopped?
- Another area is being dredged for ships (or maybe the dredge barge) near the new disposal site.
- Disposal on land and disposal in diked areas within the Bay are nearly equal in cost.
- Problems of leaching and increased land pollution are negative aspects of land disposal of dredge spoil.
- The costs given for land disposal of dredge spoil seem to indicate a site near the Bay.
- The bedrock is quite deep in the area of the Bay and there probably is no economically feasible land disposal site near the Bay.
- The Port does not need more facilities, since there has been a drop in activity since 1965.
- The ED plan should justify the need for a 31-foot navigation channel. This need could not be evaluated without knowledge of the tradeoffs involved, especially since the costs of constructing and maintaining a 31-foot channel may outweigh the economic benefits gained.
- If other Great Lakes ports and facilities go to 31 feet, Toledo would be forced to do the same or suffer economic isolation.
- The differences between the EQ and ED plans are confusing—ED seems mainly concerned with a deeper shipping channel,

whereas EQ advocates on-land disposal of dredge spoil. Both plans use diked disposal, but the channel is deeper and will fill faster in the ED plan.

Other comments made at the Toledo forum included:

- Far out remedies may not be far out in 10 years.
- EQ costs (dredging?) may be more than indicated, since they were figured on the basis of a 43 percent sediment reduction. This reduction may not be reasonable since you cannot completely control the entire Basin.
- Sedimentation control should be examined by everyone concerned with the Bay since it is a major problem. Perhaps incentives should be paid to farmers to control erosion and thereby minimize detrimental effects of sedimentation. This would make the Bay much cleaner.*

General statements about resource issues in the Maumee Bay included the following:

- Toronto was cited as an example for using old dredge spoil disposal sites for recreation. Some felt this was a dream.
- There was a consensus in one work group that island No. 18, owned by the Corps of Engineers, should be turned into an area for recreation and wildlife, but that the dikes should be maintained by the Corps.
- When a vote was taken in one work group concerning navigation, about one-half of the group abstained. There were no votes to deepen the channel to 31 feet (ED), and the remaining people split between keeping the channel as it is now (EQ) and deepening it if the rest of the Great Lakes system goes to a 31 foot depth (felt to be a middle path).

In Lima a work group discussed commercial fishing within the Basin, but felt that Maumee Bay would be the only area where this could take place. The Toledo (Perrysburg) group voted to permit it by regulation.

There was an overwhelming vote in one work group against the Maumee Bay crossing. One person felt that the crossing ties into disposal sites.

Studies to date on the Bay have been fragmented, and it was felt that nobody had determined what the Bay can best be used for. Therefore, there was a unanimous expression that a comprehensive baseline study on the Bay should be undertaken first, but that a balanced general direction for the study should be determined before it begins.

Overall, it was felt that it was hard to make a decision for EQ or ED since there is little difference between them and little information to base a decision on. However, there was a strong feeling for environmental quality in the Bay. Most felt the EQ plan to be best overall, but felt it was inadequate compared to the Citizens' Advisory Committee goals.

COMMENTS RELATED TO MANY ELEMENTS

This section contains comments made at the forums which did not fall entirely under any one of the previous eight resource issue categories.

There were a number of general questions and comments regarding the alternative plans and the planning process:

- Concern was expressed about the apparent lack of agricultural representation on the Citizens' Advisory Committee in this highly agricultural area.
- Questions regarding the lack of local involvement in basin-wide planning (decisions) were raised.*
- One group agreed that overall basin planning, such as this study, is needed.
- It was felt that the alternative plans presented were quite comprehensive and had considered the problems in depth.
- It was felt that a lot of planning was going on now, raising the question of where the money is going to go and how to get action on certain items first.
- One group felt that the format of the booklet pitted environmental interests against economic interests and that it restricted participation rather than encouraged it.
- The data used to develop the two alternatives was thought to be the basis of any future plans, regardless of public input.

Francis Baker, Planning Board member, explains outdoor recreation planning to a work group.

- Because of these last two points, the GLBC was sincerely questioned in regard to the adequacy of public input into the planning process.
- Some skepticism was expressed by a few people–that this study will become another useless waste of time and money, and end up gathering dust on a shelf.

Some comments regarding the costs in the plan were made:

- It was agreed that it is difficult to quantify all the costs of a plan in dollar values. These non-quantifiable costs, such as health effects, should not be ignored, but they were *not* felt to be embodied in any of the three alternatives presented to the public.*
- One group moderator noted that the cost *difference* between the two plans is about $1,300,000 per year over 15 years.

General comments made that apply to numerous phases of the study were:

- It was felt that too much paperwork results in no action–the percent of Federal funding on projects is up, but the number of funded projects has decreased.
- A question was raised over how to make economic incentives fair both to those who receive them and to those who do not.
- If public ownership of land is required, local government ownership was prefered in order to minimize maintenance and accountability problems which have occurred in the past. One example cited was the Federal dikes along Lake Erie.
- One group debated between growth and no-growth frameworks. One side felt that no growth is the same as death, while the other side felt unlimited growth within finite limits is a physical impossibility.
- It was stated that we have been paying for the present by borrowing from the future for too long–and that it is time we start paying for the full cost of our operations.
- The use of large farm machinery, the existing tax system, and a governmental push to produce more were felt to be destroying the basic soil structure which has made the U.S. agricultural community what it is today. There was felt to be a need to improve upon existing practices which are harmful to the soil and the environment.
- A need was expressed for slowing up our highly productive and profit oriented lifestyle and considering the needs of future operations.
- Many people feel that the U.S., because of its endowment of good agricultural soil, is obligated to help feed the world's population.
- A question was raised as to whether EQ had been overstated in the planning.
- It was considered difficult to discuss specific problems in specific areas without including the rest of the world.
- Other questions included how reliable the population projections are, what our energy supplies and needs are going to be in 1990, and how these factors and current laws will affect the recommended plan.
- The idle military was considered a useful resource to help construct needed improvements in the final plan.
- City people were thought to need education about farming and farming practices in order to understand the plight of the farmer.
- Education was felt to have made more people willing to pay for projects.
- Rights-of-way along roads and highways were thought to need defining.
- More tree plantings were felt to be needed.
- The decentralization of industry was considered an improvement.
- More use of the media, especially television, was recommended for explaining resource problems to the public.
- It was suggested that the GLBC staff should canoe the Maumee to learn more about water quality and other problems of the river.
- To tabulate the questionnaire, it was suggested that people phone their feelings in to radio stations.
- Environmental and economic interests were thought by some to dovetail–environmentalists should not always be regarded as those who say "no" to development.

Concluding comments about the two plans as a whole were as follows:

- The plans were felt to be too large, too expensive, too grandiose, and impossible to implement by 1990.
- Trade-offs between the two plans were felt to be important considerations in determining the final plan.
- Concern was expressed over possible inflexibility in rules and regulations of programs stemming from the study.
- Both plans seemed to suggest that the farmer will be the one who has to bear most of the cost and inconvenience.
- It was felt that benefits for the final plan should be shown in dollars, and that intangible benefits should also be included.
- It was felt that the final plan should document the process of choosing the final programs.
- The ED plan was generally favored over the EQ plan.*
- One group wanted the best plan environmentally, but realized that the consideration of costs would be important in choosing it.
- Many people thought that the final plan should be a balance or compromise between the ED and EQ alternatives which were presented, and that the best components of these plans should appear in the final plan.*****

Finally, a few comments concerning implementation of the final plan were made:

- One group had fears that the Level B study would be bookshelved and never used.
- Major decisions regarding selection and implementation of the final plan were considered best made at the local level; however, it was noted that decisions in one area affect other areas. Therefore it was stated that local decision-making should not go to extremes, and that people from throughout the Basin should be allowed to provide input into decision-making processes.
- There was a strong feeling that greater coordination should be established between the state and local agencies responsible for plan implementation.

3
FORUM RECORDER NOTES

This section of the report is a compilation of the notes submitted by the recorders at the public forums. All the notes we received have been retyped for clarity, but have not been altered or edited in any manner. These are the actual notes we received and used to write the summary presented in Section 2. These notes have been reproduced here as a source of information to supplement the summary. The notes are arranged by forum and work group.

The work groups were divided as follows:

Groups 1 and 2 – All components of both plans
Group 3 – Land Resources Management and Erosion and Sedimentation
Group 4 – Water Quality, Water Supply, and Flood Plains
Group 5 – Outdoor Recreation and Fish and Wildlife
Group 6 – Maumee Bay (Toledo only)

Some participants engage in an informal discussion leaving the Napoleon Forum.

Van Wert

VAN WERT

Group 1 & 2
Moderator: James Piper, George Ropp
Recorder: James Piper, George Ropp

A. Brief initial discussion of local problems
Moderator: Ropp
Recorder: Piper

1. Concern expressed about the apparent lack of agricultural representation on the Citizens' Advisory Committee for an area which is predominantly agricultural.
2. Several persons felt that drainage was a primary need in the area. Ditches are cleaned on the upper ends to improve drainage, but more work must be done downstream. Sediment and Flooding are problems. Little Auglaize River Watershed projects need to be completed. St. Marys River needs clearing and snagging to remove and prevent log jams.
3. St. Marys lake causes problems for agriculture when water level is managed for recreation.
4. Comment that too much paperwork results in no action. % of Federal Funding is up, but number of projects funded is decreased.
5. Van Wert City spent $2,000,000 on a sewage treatment plant (75% federal cost sharing) but had to agree to separate storm and sanitary sewers at a cost of $5,000,000 (no federal funding). Town Creek must be cleaned to permit water to get away without damage and to allow efficient operation of city drainage (Town Creek is part of Little Auglaize River Watersheds - Middle Branch).

B. Discussion of EQ Plan versus ED Plan
Moderator: Piper
Recorder: Ropp

1. Land Resources Management
   a) Comments that both EQ and ED Plans would require considerable legislation. Appeared to group that this area concerned more densely populated areas.
2. Erosion and Sedimentation
   a) Regardless of what type of programs initiated, the success will depend on the individual farmers. Management is a big factor.
   b) Need an intensive education program.
   c) Fall plowing is a concern, but is related to soil types, slopes, size of farming operation, individual management practices, etc.
   d) Grass filters strips in both EQ and ED were felt to be needed and will require an incentive program and education.
3. Water Quality
   a) Differing opinions on treatment of storm water from municipalities were presented.
   b) Dave Gregorka indicated that legislation already exists which would require treatment of storm water.
4. Wildlife and Hunting
   a) Cost appears to be somewhat misleading due to land being leased back to agriculture.
5. Recreation and Fishing
   a) The use of farm ponds should be considered to provide rural recreation and fishing needs.
6. Rural and Urban Flooding
   a) The Little Auglaize River Watersheds project was not included under the Economic Development Plan. It was felt that this should definitely be included in the plan since it is an approved P.L. 566 project.
   b) It appears that the EQ Plan will require a lot of legislation, zoning, enforcement, etc.

Conclusion

Study Group 1 and 2 generally favored the Economic Development Plan over the Environmental Development Plan.

Group 3
Moderator: Carlos Waltz
Recorder: C.D. Pennell

Discussion centered on the following topics:

1. Fall and versus Spring Plowing.
2. Need for defining Right-of-Way along roads and highways.
3. Need for tree plantings.
4. Requirement of 15 ft. Easement along project.
5. Wild life people do not give reasons for loss of game-there is more cover now.
6. Van Wert County needs 100% Crop Production.
7. Education - This has made more people willing to pay for projects.
8. Industry has decentralized - an improvement.
9. Fact - You cannot grow plants without drainage.
10. Vast improvements have been made thru structures at outlets and grass waterways.

Conclusion

Beneficial effects of good drainage far exceed the adverse effects in Land Use, Control of Erosion, and Sedimentation. If Government is willing to pay for grass strips, etc., then they will be used.

Group 4 and 5
Moderator: L.E. Eisenhauer
Recorder: L.E. Eisenhauer

Those that were in attendance expressed concern over the lack of interest by the public at this meeting.

Water Quality, Water Supply, Flood Plains

Water Quality and Water Supply - The City of Van Wert has very good storage system for surface water and sufficient water treatment plant facility as well as the completion of construction of their tertiary sewage treatment plant. Separate storm and sanitary sewers are under construction throughout the city.

Flood Plains - Flood plain encroachment however is a definite problem in this area. It was the consensus of those present that further legislation is necessary to stop the aforesaid encroachment.

Outdoor Recreation, Fish and Wildlife

There is a definite need for increased recreation and opportunities.

Conclusion

This group favored the Economic Development Plan over the Environmental Development Plan. They also could not understand why the Little Auglaize River Watersheds project was not included under the Economic Development Plan. It was felt that this should definitely be included in the plan since it is an approved P.L. 566 project.

LIMA

Group 1 and 2
Moderator: Dr. David Hager
Recorder: Pay Muniyappa

Dr. David Hager introduced the subject to the group. The group discussed several components of both environmental quality (EQ) and economic development (ED) plans.

Preservation of agricultural land generated considerable discussion since the participants were concerned with maintaining a high level of agricultural production to meet the food and fibre needs of the entire world. At present, agricultural land is subject to a lot of development pressure. In order to prevent this land conversion process, they suggested that agricultural land preservation should be encouraged through such

measures as tax incentives, land use controls, etc. They also felt public education should play an important role in encouraging agricultural preservation.

Also discussed were the minimum tillage practices, crop rotation, reduction in fertilizer application, erosion control, and other management techniques. These were considered essential to preserve the environmental quality. There will be less farm land under the EQ plan, while more land will be put in agricultural use under the ED plan; a question arose as to which of these two alternatives has the maximum economic advantage. It was stated that although the ED plan may seem to have a greater economic advantage at present, the EQ plan will prove to be the most advantageous in the long run. The EQ plan suggests several conservation measures; as a result, the land area under farming will be relatively less than the ED plan.

Several questions were raised on financing and implementation of these plans. It was clarified that financing will most likely come from increased taxes and implementation will be the responsibility of the state and local governments. Concerning implementation, the participants strongly felt that a greater coordination should be established between the state and local agencies responsible for plan implementation.

In order to increase the recreation potential it was suggested that public access sites to recreation areas should be increased. They also suggested that at least 15 to 25 feet of grass strips should be retained without cultivation along the stream banks. These grass strips will provide adequate cover for wild life, serve for recreational purposes and for stream maintenance activities. Concern was expressed over wood lots which are currently being subject to urban and suburban development pressure. They recommended that some tax incentive measures should be employed to preserve these wood lots.

Questions were raised regarding the lack of local involvement on planning decisions made for the basin. After considerable discussion the participants generally agreed that overall planning, such as the Great Lakes Basin Study, is required. It was explained that the ultimate authority for implementation rests with the state and local governments.

There was considerable discussion on clearing and snagging of streams. The participants thought the approach taken in both EQ and ED plans were somewhat extreme and probably should take an intermediary approach that can strike a balance between these two plans.

Also discussed was improving water quality by reducing waste loads, controlling erosion and sedimentation, etc. However, there were some questions among the participants as to the varying levels of emphasis placed on pollution control in both EQ and ED plans. The participants discussed the present pollution control laws and felt that they were not adequately enforced. They felt that the regulations should be stringently enforced; otherwise, we will continue to have polluted streams.

Discussion was also focused on water quality, hunting, fishing and recreation. The participants felt that if we can reduce erosion and sedimentation by such means as minimum tillage, providing grass strips along the stream banks, providing grass waterways, etc., the water quality could be significantly improved. By improving water quality we will encourage fishing and other recreational activities.

The group questioned whether cost should be considered as the major criteria in selecting the plan. After some discussion, the participants generally agreed that a long-range approach should be taken. It was the consensus of the group that the plan selected should reflect both environmental as well as economic considerations.

Group 3
Moderator: Larry Creeter
Recorder: Charles Kiphart

Land Resource Management, Erosion and Sedimentation

Each person present gave a brief personal introduction. There was a total of twenty-five persons present at the Group #3 meeting; of the total number, twelve represented the agricultural community; seven worked for various governmental agencies, four were employed by industrial firms, one was an instructor, and one person was employed by a private soils testing laboratory.

A question was asked as to what are the present direct economic incentives for agricultural erosion control practices. It was stated that at the present time there is the Agricultural Conservation Program. This is a cost/sharing program for conservation practices including the installation of field tile, ditch and stream erosion control structures, farm ponds, timber stand improvement practices, increase vegetation cover, etc. This program is currently sponsored by the Agricultural Stabilization and Conservation Service. The 1976 program is to include high priority, low cost erosion, sedimentation, and conservation needs. Each county gets approximately $25,000 cost sharing monies and develops their own program.

The question was then asked if there were any enforcement regulations providing for the perpetuation of water-ways that had been installed under this cost sharing program. It was stated that so far as any one

knew, there were no regulations concerning the perpetuation of water-ways or other projects installed under the cost sharing program. The fact that the Soil Conservation Service follows no policing practice was discussed. Last year, one county under their conservation cost sharing program initiated long term agreements with property owners for the perpetuation of any project constructed with program monies. Such an agreement would be terminated once the property was sold.

It was stated that there was a need for more public input into the programs that the Great Lakes Basin Commission was trying to formulate. During the last thirty years, the farm community practiced good farming conservation procedures because of government conservation incentive programs. The Federal government now tells the farmer to produce more, while at the same time, abolishes conservation incentive programs at a time when they are sadly needed. It was felt by the group that there was a need for long-term conservation incentive programs such as existed in the past.

Discussion then turned to the proposed alternate Environmental Quality vs. Economic Development plans. Some group members felt that the EQ and ED plans as presented in the report were presented with different emphasis than the presentation held a few minutes before in the general session. Some confusion was felt by the group members as a result of the two presentations, written vs. oral.

Several minutes of discussion were held concerning the amount of soil lost within the Maumee River Basin due to various erosive urban development and farming factors.

The possibility of expanding the commercial fishing industry within the Maumee River Basin was discussed. Some group members felt that the Maumee Bay area was the only place in which increased commercial fishing would take place.

It was generally accepted that there would have to be a trade off between maximizing one factor (increased agricultural productivity) while minimizing another factor (increased wildlife) and vice versa when considering the EQ and ED alternate plans.

A high emphasis was placed on the need for increased fishing areas by the group members. Everyone seemed to agree that there were many factors that must be considered in any wildlife management program. One person felt that there was enough existing cover for game in this area.

The question was asked as to how the two alternative plans differed in land use management proposals. There is a need for compromise - a need for reasonable balance between the two proposals.

The possibility of converting to zero tillage farming methods was mentioned. It would take several years in order for the farmer to convert from conventional farming practice to zero-tillage farming methods. We can't change existing farming practices overnight. It was felt that conversion to zero tillage farming methods would help to conserve fuel, and at the same time, reduce detrimental effects to the soil structure and perhaps reduce sedimentation and erosion.

Perhaps we have been moving too fast since World War II. Many questions must be answered concerning past and existing farming practices. There is a need to maintain the natural soil structure. Intense farming practices have altered the natural soil structure and now we are beginning to pay the price with increased erosion, stream sedimentation problems, and the need to apply more fertilizer in order to sustain production. Agricultural lands are not draining as good as they did a few years ago. One way in which to increase soil structure is to return to the old practice of crop rotation and planting deep rooted legume crops during one year of the crop rotation process.

There was a feeling that the old idea of idealist (environmental) vs. farmer (economic) was in action here. The environment is being changed in a way that it has never been changed before. With the use of large farm machinery, the existing tax system, and a governmental push to produce more, we have been destroying the basic soil structure which has made the U.S. agricultural community what it is today. Once the soils are destroyed, it takes a long time to rebuild them. What we are really doing is destroying the food producing soils that we and future generations will be so dependent on. It seems as though there is a need to look at existing farming practices and find ways to improve upon those practices harmful to the soil and the surrounding environment.

Some group members felt that we need to slow up our existing highly productive and profit oriented life style and consider the needs of future generations. We are, perhaps, too eager for large economic returns while ignoring what we are doing to the environment, especially the prime agricultural soils.

On the other side of the coin, it is a fact that much of the best agricultural soils of the world are found in the United States; therefore, many people feel that we are obligated to help feed the world's population.

The problem of continuous urban development on agricultural lands was discussed. The question was asked as to where the future population of the world would live if development of agricultural lands was put to a

halt. It was stated that the population of most areas of the county were decreasing, and still we are loosing prime agricultural lands to urban development.

Concerning the Environmental Quality and Economic Development alternate plans for land use management, it was felt that statements such as "emphasizing the guidance of urbanization" and "stressing efficient use of" are pretty weak phrases. Some group members felt that there was a need for a more positive and specific approach to each one of the plans. There is a need to spell out specific proposals dealing with economic incentive programs, programs of controlling the spread of urban development onto prime agricultural lands, and how these programs are going to be enforced.

It was the general consensus of the group that the Great Lakes Basin Commission needs to draw the best components from each plan and propose specific programs for the purpose of implementing the program plan.

In summing up, the general consensus of the group was as follows:

1. A need to improve upon the negative agricultural and urban development practices throughout the country. The group felt this could best be done by initiating financial incentive programs for the purpose of conservation practices for the agricultural and development community.

2. That future land use be based on the results of reasonable land use capability studies.

3. A further need to educate the general public, especially elected officials, in the area of proper land use management practices, using all educational resources available.

4. That the proposed Environmental Quality and Economic Development Plans of the Great Lakes Basin Committee are too weak in dealing with specific land use problems. Elaboration is needed on specific financial incentive programs, land management and conservation programs, and proposals for the enforcement of recommended programs.

Group 4
Moderator: S. Bresler
Recorder: C. Foster

Resource Person: P. Gersten

Bill Norris, Wright State University Biologist
Ken Smith, Ohio State University Zoologist
Dan Blair, Consulting Engineer
L. Meyers, Regional Planning
B. Gausman
Gale Genalt

Mr. Bresler opened the discussion by describing the goal of our meeting as finding an optimum balance between the EQ and ED alternatives. The question was asked as to whether EQ had been overstressed in the planning...the response was serious questioning of ED. What kind of ED is needed if any? Most of us agreed that it is a good idea to keep prime agricultural land growing food. Non agricultural uses should be concentrated on the poorer ground (in other words, put the heavy industry in Southern Ohio.) The comeback was a question about employment opportunities for the projected population increase. This was kind of slurred over by mentioning that it was difficult to discuss specific problems in specific areas without including the rest of the world. Then someone mentioned that job hunters can (and do) migrate to where the jobs are. This out migration might change population projections.

This question of projected figures led to similar questions as to the reliability of the other projected figures. What are our energy supplies and needs going to be in 1990? Laws? How will this affect the plan?

As we were straying further and further from discussion on Water Quality, Mr. Bresler asked "How about waste treatment plants? How much is the public willing to pay for clean water? After a few diversionary discussions about Corps of Engineer permits to alter water quality and State EPA water quality standards, we actually discussed water treatment plants a bit. It was pointed out that a municipality, industry, or whatever could find itself in a position where it was dumping cleaner water into a stream than it was taking out (in order to comply with water quality standards). Certainly then, the ED and ED could both be enhanced by developing closed water systems. In this manner, both the water and the "wastes" could be recycled while the stream would heal itself with time. Dumping wastes in the stream would still be prohibited.

One of the more interesting "diversionary discussions" mentioned above was on non-point pollution. It was mentioned that this consists mostly of silt, pesticides, and fertilizers from farm land. It was pointed out that this could be substantially controlled by extensive use of sod waterways, filter strips, field windbreaks, erosion control structures, and the proper application of fertilizers (at the right time of the

year and according to soil tests). It was stressed that farmers are more likely to comply to incentives and education than to legal mandates. After all, why should a farmer take several of his $2000+ per acre land out of production for free? Certainly the person downstream who is benefiting should help reimburse the farmer for his sacrifice. Perhaps the land tied up in conservation practices should be held tax exempt; or perhaps the farmer should be paid for his net loss in yield. [Perhaps this net loss in yield could be considered as partial payment of income tax?...recorder].

Someone was talking about the 10% interest rates used currently by planners when figuring program costs when our time ran out. We tried to get a consensus on tradeoffs between EQ and ED. The vote was 3 for EQ, 2 for ED, and 2 abstentions (some must have already been leaving). While one side was pointing out the obvious truth that non-growth is the same as death, the other side was pointing out the equally obvious truth that unlimited growth within finite limits is a physical impossibility. For too long, we have been paying for the present by borrowing from the future-It is about time we started paying the full cost of our operations.

Group 5
Moderator: Ann Lauer
Recorder: Jency Brown

QUESTION: What incentives available for landowners to permit hunting:

Discussion: Offer landowners tax incentives for allowing hunting; offer landowners tax incentives for preservation of habitat; pay so much per acre for use of land.

Opinion: Seems like more and more people posting NO HUNTING signs - could be due to public abuse of right to hunt.

Opinion: Incentive program would encourage people who now allow hunting for free to want to make some money; thus would add to cost.

Opinion: Farmers must be encouraged not to destroy habitat such as hedgerows, ditches, etc.

QUESTION: Concern was noted over use and development of Auglaize River. How would river be handled if placed under State Scenic Rivers Program?

Discussion: It was noted that the river could be a significant wildlife area and could provide many recreational opportunities if properly handled. It was suggested that a program of limited snagging and clearing would be sufficient to provide boating and swimming, while preserving wildlife habitat.

Fishing right now is limited, only carp caught. Water quality too low for other species.

Stump problem in river due mainly to dead elm.

Noted that power dam on Auglaize in Defiance is a problem due to its size.

Army Corps of Engineers can only clean rivers for flood control purposes, not for recreation.

Noted that channelization ruins habitat, does little if any good. Little Auglaize example was cited.

QUESTION: Any provision for creation of up-ground reservoirs in either plan?

Discussion: Noted that old Ohio Water Plan was adequate. Also noted that plan was never finished.

Reservoir building - design should promote fish habitat.

QUESTION: Seems that ED plan provides no help at all for fisheries resources.

Discussion: Increased farming under ED would add to sedimentation, and reduce water quality. Channelization under ED destroys habitat. Noted that river and stream bank planting would reduce erosion. EQ plan cleans up rivers, helps fisheries. All sediment can never be removed, but EQ plan will help.

QUESTION: What can be done about building on flood plains?

Discussion: Wisconsin laws on flood plain zoning are very strict - all lands within given distance of river or lake zoned to limit construction.

Ohio, Indiana, Michigan laws not as strict.

Too many political subdivisions control zoning - need close cooperation to insure compatible plans. Zoning must remain locally controlled - passing on to higher ups only compounds problems.

SUMMARY: Group opinion seemed totally to support the EQ plan. Very much in favor of EQ's provisions for preservation of natural areas and for improving fisheries resources.

Findlay

FINDLAY

Group 1 & 2
Moderator: Harry Freeman
Recorder: Steven Roser

Discussion started on the topic of environmental quality. Opinions were stated in regards to P.L. 566 and channelization projects. It was stated that past channelization projects were not acceptable.

5. The issue of wildlife and hunting was discussed with the following considerations:
   a) Wildlife - deer populations are increasing.
   b) Hunting - farmer is over-burdened by hunting demands. Public land acquisition will relieve some pressure to farmers but will not be an answer increase wildlife.

3. The issue of water quality.
   Improve water quality at source
   a) Promote less intense cropping rotations, and minimum tillage.
   b) Incentive programs and improved drained laws to promote grass filter strips, etc.

7. The issue of flooding.
   Develop strong flood plain management through zoning.

1. The issue of land resource management.
   a) Preservation of prime agricultural land through community planning.
   b) Land capability analyses.
   c) Fair taxation for agricultural.

6. The issue of outdoor recreation.
   a) Present facilities inadequate but can see major need for preservation of existing natural areas. But were concerned about taking this land out of agriculture.

2. The issue of erosion and sedimentation.
   a) All agreed a better program of erosion and sedimentation control be initiated.

It was felt that a compromise between environmental and economic measures would be necessary in developing a master plan.

Group 3
Moderator: Jim Daley
Recorder: David Schneider

1. Farmer just make a living-if going broke will sell to highest bidder-builder or farmer.

2. Farmers must have some kind of tax - income tax was suggested.

3. Zoning on county or township basis is part of the answer to stop strip development and pollution of ditches.

4. Farmers should be listened to when it comes to erosion control and legislators.

5. Don't want enforced cropland changes.

6. Start cleanout downstream for adequate outlets and encourage sod waterways, grass filter strips and beautification measures.

7. Ditch bank erosion is majority of erosion in flat farmland area.

8. Through local proceedings, small ditches can be cleaned - the help is needed on rivers!

Group 4
Moderator: Robert L. Morrison
Recorder: Robert L. Morrison

1. The committee felt the N.W. Ohio water plan was a good one and should be implemented with special emphasis on up ground reservoirs for water supply, stream, augmentation, recreation and wildlife purposes.

2. It was opposed to stringent regulation affecting the effluent from hog lot, cattle lot, etc. It felt the economic impact from this type of regulation would place the small farmer in jeopardy forcing him out of business. The farmer is in a position where he has no control over the price he receives for his commodities. Forcing the small farm operation out would make the large, larger and thus change the pricing structure. It was felt that the air and water pollution from the small operation was neglible and insignificant.

3. Discussion on the Basin Plans as a whole seemed to indicate the plan was too large, expensive, and grandiose and could never be implemented by 1990. It was felt also, that the plans indicate the farmer will be the one to bear most of the cost and inconvenience if either plan is implemented.

4. It was the feeling a balance needed to be struck between the EQ and ED plans, but the committee did not have time to review this in depth at an hour session.

5. It was suggested that no tillage practices would improve water quality, however, not all soils in the basin would support this method of farming. Some farms have a dozen different types of soil on the farm that would require different methods of tillage. An across the board change to no tillage would result in many areas laying idle because of the impracticability of no tillage methods. This would change the economic status. The farmer could not afford to own all different equipment.

6. It was suggested that the idle military could be utilized to construct the needed improvements. They would now have time to divert their training to peaceful uses.

7. It was felt there was a need to educate the city dweller about farming and farming practices. Many do not understand the plight of the farmer.

8. The farmers would not be opposed to grass filter strips along ditches provided it was properly explained to them and they were compensated in some way for the loss of production land. Tax break, etc.

9. They felt there was a need to control the flood runoff from developed areas. Retainage basins, detainage basins, allowing parking lots to flood for a period of time would be helpful. We cannot continue to rush it to Lake Erie as a solution to local flooding.

10. The black snow in the cities indicate there is a need to treat storm flow as well. Maybe not to the same extent as sanitary, but some means to keep this material out of our streams.

Group 5
Moderator: Tim Brugeman
Recorder: Barb DeHays

Planned Measures

Mr. Baker - gave a brief summary of the differences between EQ & ED
Stating - both seem to supply the same amount of needs (recreation) but EQ supplies it in a higher quality setting.

Proposed hunting sites discussed - question arose specifically on who would purchase - State? Concern on the landowners part as to having land taken away (Hardin County example).

Question on contamination in the Blanchard River discussed - poor water quality and how it is contaminated.

How do we solve the problem?
Comment - everyone should carry their fair share (people involvement) to work (not for just money input).

Question on using school facilities during the summer since they are already there. General feeling was - they should be available for use. Are interests to be satisfied on a minimum amount of land - example (Van Buren St. Park) or Natural Areas preserved.

Preservation

Not fee-simple but possibility of easements (landowners concern on compensation possibilities).

Passive recreation was reviewed as a need.

Trade offs vs. adverse (cost vs. recreation provisions).

Private sectors will only operate where money is a factor.

Findlay-Toledo (Perrysburg)

Fisheries

Question - If there was quality water in the Blanchard how often would you like to see accesses available for fishing? No comment from group - just resource people.

Question - Should more areas be purchased? Comment - fewer areas should be kept up due to the extensive cost of policing and up-keep.

Extensive facilities and leisure time. Comment - I find it hard to see the need for additional recreational areas/facilities.

Future needs referred to.
Comment - There is a difference between city residents needs and county residents based on time availability (should be looked at on two scales).

Population growth discussed.

Wildlife and Hunting

Problems reviewed - Group feeling
Comment - If the State acquired the land for habitat, the wildlife would spread.
Question - Is public ownership the only answer? Comment - A program possibility with the farmers to stop negligence on State owned land.

Trade Offs

Land prices discussed (Bolster programs). One reason why more State owned land is not in this area.

Fishing

Problems reviewed - (Access availability questioned again - no comment [no fishermen in the group]).

Adverse effects reviewed. EQ & ED

Comment - farmers or landowners are concerned about the loss of land.

Areas along rivers and creeks discussed. Comment - Cooperation is needed to make habitat areas available so that land does not need to be purchased (This comment has arisen twice).

Group Feelings

A change in attitudes in recreation and the environment. These programs are usually last on the list to receive money and the first to have it taken away.

General feeling was toward the fear of land being purchased by the "State" away from the landowner - however, the feeling existed that if land was not going to be taken care of it should be preserved, even if purchased by the State.

TOLEDO (Perrysburg)

Group 1 & 2
Moderator: Joseph Ballard
Recorder: Ted Ligibel

I. Land Resources Management

A. The following questions and opinions were covered in an in-depth discussion by the participating citizens, concerning the rights of the individual vs. overall land use control. This discussion used about 60% of the allotted time.

1) Question (Q): In the Economic Development (ED) section, what does the 'minimal cost aspect' refer to? Answer (A): It refers to site development, and the minimization of cost for sewers, transportation, police, etc. at a local level. It is the burden of public and private facilities to guide development.

B. A discussion of zoning ensued, concerning its cost, public education, implementation, and structuring.

1) The question of who should control zoning matters arose, and many of the participants felt it should be kept as local as possible.

2) State Agricultural Zoning was discussed in terms of costs, tax programs, and assessments. The following questions were raised: How should farmers be taxed? Should the farmer be taxed for creeping urbanism? Should agreements be made to allow the farmer to farm for a certain period at the same tax rate, even if sewer and water lines are extended?

   a) Opinion (Op.): Farmers have more to lose dollar-wise, than the urban dweller, because the farmer is not properly compensated for his land.

   b) Op: Farmers should be allowed to land speculate, and that there should be tax incentives, such as deferred assessments.
   Q: Why should the farmer or big landowner pay for the improvements to his area, such as sewers, water, etc. for a near-by development when he does not need them.

   c) Q: Should leap-frog type development be allowed to exist?
   Op: County governments should have a plan for growth that is strong and can control development.

   d) Op: All pay for sewers, water, etc. when such facilities are extended, so should the farmer be allowed to escape these costs, because he has a non-similar use.

   e) Op: Efficiency decreases the farther facilities are extended and the use area declines, but all still pay for the extended services.

   f) Op: The farmer who is surrounded by urban sprawl in a 'leap-frog' development area is pressured into converting his land to urban uses, because prime agricultural land can't economically compete with the price of urban land.

3) Land Use Planning was discussed in terms of EQ and ED. Some felt ED would require much planning, an expansion of local planning, and allowing the individual to retain his right to sell his land, whereas EQ would require a trade-off of local control for a more regional approach.

   a) Q: Where should new developments be placed? In an Urban Renewal area (EQ), or to a new, undisturbed area (ED); such as wooded and open spaces, etc.

   b) Op: We are losing too much wildlife habitat because there is no money available to purchase them.

4) A discussion of Transfer of Development Rights (TDR) ensued, and the following explanation was offered: TDR provides for development, while helping to guide it according to local possibilities, and is an equitable system because a person may buy or sell the development rights to a parcel of land. It is unlike current zoning, in that one is compensated for their land. To implement TDR, a good general zoning ordinance, which is adhered to, is needed, where all land is given appropriate development rights; these rights would then have to be purchased by the perspective buyer. Density zoning will also affect TDR, such that Agricultural development rights may consist of one unit/acre, while suburban rights would be more/acre. It should also be known if sewer and water lines would be included in the eventual TDR plan (Explanation by citizens and GLBC Staff).

C. Final Conclusion: We do need land use planning, as long as it is kept workable, and can be controlled on a local level!

II. Erosion and Sedimentation

A. The following questions and opinions were discussed, using approximately 30% of the alotted time.

1) Q: How can an increase in sheet erosion occur in the EQ section?
A: This projection was based upon a computer model of farm practices which determined erosion. The model was based upon a hydrologic area, and not just a one county area. Therefore, although an 'overall reduction' in erosion of 50% is predicted for the Maumee Basin, there may be an increase of erosion in PSA 5. The 'overall reduction' will be due to the rearrangement of cropland, so that less erodable (low growing) crops will be planted on easily erodible slopes, and more erodible (tall growing) crops will be planted on less erodible flat surfaces. These measures, rotation of crops, and the use of minimum till practices will result in an overall reduction, but possibly more erosion in PSA 5.

2) Q: What if the farmer cannot sell the crop to be planted on less erodible land, in the area?
A: A detailed soil survey of each farm could be done, and one would have to conform the best way possible. A subsidy may be provided to the farmer if only the less erodible crop could be grown on his land.

3) Q: What is the Annual Average Cost for this section for?
A: Changes in land use, stream erosion control measures, grass-stripping along channelized streams, and urban erosion control programs. Q: Where will this money come from? A: These would be basically public dolars, with cost sharing possibilities.

4) Q: Could trees be planted along channelized streams instead of grass strips, to enhance the beauty and wildlife habitat? A: Grass strips are necessary for already denuded streams because they trap

silty water before it spills into the stream, whereas trees, when growing and larger, support little vegetation under them to trap the runoff.

5) Q: Should tax incentives be used to plant these grass strips, or should the local owner be ordered to do this? Op: It would be better to use tax incentives.

6) Op: Channelization should be decreased because it does more harm than good.

B. Final Conclusion: The biggest problem in PSA 5 is sedimentation in Maumee Bay. If upstream erosion could be controlled, the Bay would become considerably cleaner!

III. At this point, having used about 90% of the allotted time, the moderator asked for a consensus on which topics the citizens would most like to discuss. Outdoor Recreation was the next topic chosen, and there was a good discussion on this topic, with comment from nearly all citizens.

IV. Outdoor Recreation

A. The following questions and opinions were discussed concerning the determination of Outdoor Recreation.

1) Op: Outdoor Recreation should be left to free enterprise, not governmental bodies.

2) Op: Outdoor Recreation was not the domain of free enterprise, as the private sector would not meet recreation needs that must be met. They asked if free enterprise would have purchased the former Stranahan Estate in Toledo (now Wildwood Preserve Metropark) for parkland? They felt this would not have happened, because in fact private interests would have made this area into a housing development.

3) Op: Free enterprise is a money making venture, involved in swimming, camping, etc., whereas public organizations make up the need for open space, hiking areas, woodlands, and so on.

4) Q: Are boating ramps needed on the Maumee River? Op: There are a huge nunber of boats in Ohio and in this area, who are potential users of such ramps.

V. Urban and Rural Flooding

A. The following opinions and questions were discussed:

1) Op: Preservation as open space was the best way to use land in a flood plain, it could then be used for recreation only.

2) Q: Are we taking out of local tax bases too much land for Recreation only? Op: We will be saving money by not building in a flood plain area.

3) Q: Would it be cheaper to buy all the land in flood-prone Point Place in Toledo and remove all the houses, than to build and rebuild dikes, and pay for flood damages over the years?

4) Q: How are the Average Annual Costs for protection of such areas figured? Op: The costs grow tremendously as local agencies procrastinate about the protective devices and measures.

5) Q: Should Crane Creek State Park and the Ottawa National Wildlife Refuge on Lake Erie have been developed to increase the tax base, or for better use of the land? General Op: No, obviously not.

VI. Land Use/Open Space

A. Opinions and Questions discussed in a section that was not a separate issue in the EQ or ED Alternative Plan

1) Op: There is a recommended amount of population vs. open space to be acquired for the Toledo area, based on 1957 Government figures. Toledo was behind in this 10 years ago, and concern was expressed as to how far we are behind now.

2) Op: Much land that was earmarked for open space has now been gobbled up for development, even after an open space plan was adopted by the local government (i.e., Roachton Woods in Wood Co.).

3) Q: Should we sacrifice one open space for another, or are we grabbing too much land overall?

4) Op: How many people will actually use the new Turkey Foot Rock Park on the Maumee River near Napoleon, Ohio? This was prime agricultural land taken for open space. Was this a good decision?

5) Q: Do we want more or less land use regulation, and what should come under these regulations if they are adopted?

6) Op: Land Use Regulation is a protection depending upon who construes it.

B. Final Conclusion: We do need Land Use Regulation, but we must be able to control it ourselves on the local level!

VII. Water Quality

A. The following questions and opinions were discussed in this section on Water Quality:

1) Q: How much water quality do we want? Op: It is tied into Land Resources Management, and all of the other issues presented in the Level B Study.

2) The Level B ED Alternative on Water Quality states it can meet State Water Quality standards by basically controlling only the point sources of pollution. Op: This could not be true, because there is tremendous pollution from non-point sources, and therefore the ED Alternative is incorrect in offering this as a planned result.

3) Explanation by GLBC Staff: The cheapest manner to control pollution is to control it in one area. It may not be necessary to reduce pollution by 95% overall in order to meet the State standards.

4) Explanation by GLBC staff: The Water Quality Average Annual Cost is not a Net Cost, and represent sketchy figures from EPA.

5) Q: Are farmers using too much fertilizer? Answer by GLBC Staff: Yes, but the usage is down. Farmers need to know the best times and areas for fertilizer application.

6) Op: Too much fertilizer ends up as runoff into the water.

7) Op: This runoff cannot be halted.

8) Op: This runoff can be halted, by knowing and using the best methods of application.

9) Op: The cost burdens on some municipalities are exorbitant because knowledge of area streams is lacking.

B. Final Conclusion:

1) If area rivers are cleaned up, life will return to them!

2) The worst pollution offenders must be identified and controlled; so that all farmers are not blanketed with blame and forced to curtail their practices.

3) All areas of stream pollution, stream loads, water capabilities, and such must be scrutinized, so that all are aware of control costs and methods.

VIII. Overall Theme and General Conclusion

All of the Issues listed as Alternatives of the Level B Study are connected with Land Use Control, and if Land Use Regulations existed, many of these problems could be solved. Therefore, Land Use Regulations are needed, but these controls must be workable and administered at the local level.

Group 3
Moderator: George Kunkle
Recorder: Judith M. Verny

1. Drainage

Drainage in rural areas is the most important need and is required before any land management practice will benefit the farmer.

2. Land Capability

The physical capability of land for development is not a constraint in the Maumee River basin as most of the land is developable. Land that is prime for agriculture is also prime for housing development. Use of land capability analysis may have limited value in developing a land resource management plan. It is more apropos to areas with a lot of natural hazards.

3. Water Quality

Overall, the goal of developers, farmers and Environmentalists is the same in respect to erosion and sedimentation. All want good water quality. The farmer wants to preserve his top soil, the Environmentalist wants the farmer to keep it.

Consensus - Agricultural erosion control programs are presently available through the U.S.D.A. but are not adequately funded. Additional money is needed to implement the existing programs.

Consensus - There was an overwhelming consensus that sediment problems should be solved at their source.

4. Public Ownership of Land

Programs that require public ownership of land result in maintenance and accountability problems as

evidenced by some federal dikes along Lake Erie. If public ownership is required then local government ownership is preferred over state or federal.

5. Lake Flood Plain

Land management of the lake flood plain should match approved uses compatible with flooding. Structural solutions to lake flooding is the preferred method of control.

6. Final Plan

a) Benefits should be listed in dollar value, and include the intangible benefits.

b) Documentation should be shown for choosing programs.

Group 4
Moderator: Tom Kovacik
Recorder: Virginia Clifford

Water Quality, Water Supply

1. Non Point Source

* The biggest polluter relative to sedimentation - non point sources along river and drainage areas.
* There is evidence of fertilizer overkill where farmers are encouraged to use 3-4 times over what is necessary. The excess is washed away into the river.
* The most important issue for the Maumee River was to control sedimentation.

2. Point Source Discharge

* Municipal Sewage Treatment - Important to demand that all the volume is treated and that overflows do not occur. Efforts should be made to develop newer approaches to sewage treatment; including individual systems for septic tanks.
* Sludge - Essential for communities to treat their own waste and not to ship it into the next county. With the coming age of shortages, recycling should be considered, and returning the fertilizer to the soil rather than wasting energy on artificial fertilizer.
* Industrial Pollution - It was questioned as to how effective the NPDES program really was. Should industries be required to pay for their sewage effluent and removal of chemicals - especially the phosphates? Spot checks and better monitoring is needed both day and night.

3. How clean do we want the Maumee River

* Imperative to improve the water quality for health reasons.
* Desirable to have it as a recreational river - 50% reduction in sedimentation. Reduce the fecal coliform and chemical discharges from municipalities and industrial plants.

4. Costs

* Will the public be willing to foot the bill? Technology is available, but are we willing to spend the money?
* P.L. 92-500 will probably not be met because of the fantastic costs.

Flood Plains

Much of the discussion was devoted to Point Place.
It was doubted that the people will want to be relocated. Evaucation has not been proposed, only diking and pumping.
P.L. 566 Authorization for channelization should not be implemented.

Conclusion

The group felt that as a whole the EQ plan was far more desirable because it gave a higher quality.

Group 5
Moderator: Art Brewer
Recorder: Doris Goldman

An overriding issue is money. Disagreement as to whether $10/capita is a good amount to spend, per yr, for recreation, for example. "Recreation" is necessary but should get term redefined or perhaps used more carefully. Support extensive more than intensive use of recreation sites since there are so many different types of recreation.

As to the term recreational river one step down from scenic, should get rid of the term. Perhaps "preservation" or "conservation" instead, so approach it from a different frame of mind. Property owners - concerned with what "recreation" implies, leads to, in addition.

Disagreement over basis for claims that more land must be acquired for recreational use in the area. Lange wants to verify-see the surveys the plan was based on that say areas are overused. Others claimed that we should be planning for future populations use, too (Ohio State outdoor recreation plan was source). In Bowling Green, definitely heavy use, even if no agreement on Toledo area yet.

Neither plan meets swimming needs to a significant extent. Hunting in our subarea should be restricted (as it is) because of the safety hazard. Fall plowing and other practices have reduced the amount of game, and unless encouragement of wildlife habitat increases wildlife won't increase. At the time there are many fishing access sites unused because they lead to poor fishing areas and others are greatly overused. Is this taken into account with land acquisition plans? People enjoy the Maumee, for example, from autos, and so Rt. 24 could be made a scenic highway, with an enforced low speed limit and no truckers, and perhaps some well supervised viewoutling; or could increase bike paths along towpath, railroads, or highways for similar cheap? and effective? provision of recreational opportunities. Or (also cheap and effective); state uses so much land for cloverleaves, etc. Don't mow the grass except where necessary, since natural plantings or allowing growth of vegetation increases safety of highways and encourages wildlife.

Group 6
Moderator: Peter Fraleigh
Recorder: Judi Young

Bay Sedimentation

Can anyone do anything about the Bay as the State of Ohio donated the Bay bottom to the Port Authority? Corps intends to fill in 250 acres? Can anyone stop or do anything? Peter can't answer that because goal to reduce dredging is not met by the Plan.

Comparison of Page 13 and 19. Disposal on land vs. in the Bay. The figure is still $18 million. Felt for the same money you could dispose on the land as in the Bay. Group was asked which they preferred.

Adverse effects - increased land pollution due to on land dredged spoil disposal.

Ralph Bernhagen, ODNR, explained land pollution problems.

It was questioned if technology wasn't available already to prevent leaching.

The cost of disposing landward with pollution problems was questioned.

It's hoped that the disposal will be close to shore. The Group thought the plan means close to the shore or it would be more than $18 million.

Present disposal site cost is $17 million?

Are there areas close to the Bay with bedrock closer to the surface? Ralph Bernhagen of ODNR - bedrock is very deep. Also thinks there is no economically feasible disposal site nearby.

Both EQ and ED use diked disposal, but will fill faster in ED and in a deeper channel. Toledo's plan is to use fills for recreation, but that sounds like a dream. But some might be used. Used Toronto as an example for use of fill. Maybe everyone should look at sedimentation. Incentives to farmers (i.e., minimize pesticides - fall plowing). Major problem.

Peter Fraleigh summarized:

It was contended that the Port needs no more facilities, since a drop from $45 million to 21 million occured since 1965. Reason for deepening? No one is sure, but there is a move to go 31 feet for Toledo to stay competitive.

Recommendation:

Justify the need for a deeper channel in ED portion of the plan. No way to evaluate without knowing tradeoffs.
If you look at costs to dredge and remove spoils for a 31 foot channel, it might not be beneficial or worthwhile.
Discussion on why there were economic and environmental plans.
On deepening Port, a comment was made that if other lakes go to 31', Toledo would have to or suffer economic isolation in shipping.
The causeway also ties into disposal sites. Already dredging another spot for ships near new site (may be for

dredge barge).
Far out remedies may not be so far out in 10 years. The costs of EQ may be more because its figured on 48% sediment reduction which the Basin doesn't completely control.
The moderator believes ED is mainly concerned with a deeper channel for shipping.
Confusion - we think EQ may be for on land, but where do you put it?
Some were hung up on dredging - what will Bay be used for? No one has studied to determine what the Bay is good for.
It was expressed that all Bay studies are fragmented.
A Bay study should be first.
Peter - there is a recognition there should be a balance. Can't put off decisions forever.
Make a decision to the general direction before the study.
Consensus - Unanimous for Bay study.
Unanimous consensus that - Island No. 18 owned by Corps should be turned into place for recreation and wildlife (probably wildlife for 50 years). But keep Corps to maintain dikes.

Summary of Opinions

Diking	Middle Position	ED
EQ - keep the channel the same	Channel only if other lakes deepen the port	Channel to 31'
5 votes (11 abstentions)	5 votes	No votes

Question of commercial fishing in the Bay?
Permit it by regulation - vote was 5 to 0
Opposed to Maumee Bay crossing
voted 17 to 0 Several abstentions

Hard to make a decision between EQ and ED. Very little to go on and very little difference.

Final Summary

Strong feeling for environmental quality in Bay. Overall feeling for EQ plan, but felt inadequate compared to CAC goals.

FORT WAYNE

Group 1 & 2
Moderator: Gil Latz
Recorder: Gil Latz

I. The Issue of Cedar Creek

A. Questions concerning data used to define clear and snag area.
1. Mr. Jarecki explained the error.
2. Group felt data should be made public.
3. Group also felt the clear and snag definition and the clear cutting definition should be further clarified in film strip.

B. Cedar Creek was next discussed in terms of environmental and economic considerations.

1. One interesting idea offered was whether money used for clear cutting could be used to reimburse farmers for crop loss due to flooding.
a. It appears that there is no legislation on the books for this at present.
2. Economically speaking, most environmentalists often fail to see flooding problems as a threat to their jobs and their income.
3. When looking at the Cedar Creek issue, we must all be careful to separate short term and long term solutions.
a. How important is the farmers livelihood vs. our need to experience the natural world?

II. Criticism of Alternative Plan Format

A. Group felt environmental interests were pitted against economic interests.
1. The vast majority of the group felt that the "Alternative Plans" restricted participation rather than encouraging it.
a. Data used to present two alternatives thought to be basis of any future plans regardless of public input.
b. G.L.B.C. sincerely questioned in regard to public input.

III. Constructive Criticism of Plan

A. Environmental interests and economic interests should dovetail
1. Environmentalists should not always be seen as those who say No to development
a. Many environmental issues are health issues. The costs of development, in health terms, should be included in Plan.
b. If water quality is object of Plan, there should be a more thorough use of media to explain this problem to public.
1. Show problem via media by using T.V. and newspapers rather than only using these mediums to report on the problem.
a. Perhaps GLBC staff should canoe the Maumee
2. In the tabulation of the questionnaire, people should be encouraged to call in their feelings via telephone to radio stations.

In conclusion, we must not lose sight of our ideals -- a clean environment for all. This was the intent of P.L. 92-500, in terms of water quality, and that should still be the goal for 1983.

Group 3
Moderator: Ernie Lesiuk
Recorder: Guy Beerbower

Land Resources Erosion and Sedimentation	The land resources management was emphasized as the most important part of the planning program, as the land is the basis for all the other components.
Water Quality	The finished plan will need to be comprised of both the Economic Development and Environmental Quality Alternatives.
Fishery Resources	The question of how the present plans of city and county plan commission that are being implemented at the present time will be coordinated with final plans of commission.
Wildife and Hunting Outdoor Recreation	There will have to be incentives for preservation and conserving of land resources. These must be accepted and financed by the whole of society.
Urban and Rural Flooding	An example: The cost of transferring from present equipment of farming to a full "no-till" operation in the Full River Basin would cost 400 million dollars.

The programs for Sedimentation and Erosion must be complete in that all segments be covered. For example, there is no need of putting in a grass waterway if no practices are applied on the cropland that borders or comes to the waterway.

The development of urban areas has a great effect on water quality. The question arose should development be made then the utilities or public service be put into effect or should the utilities and public service lead the development.

It was agreed that interceptor ditches and sewers with filter ponds would elevate many problems of drainage in development areas.

There should be in urban homes first a primary treatment a secondary then regional.

The urban and rural flooding should be controlled by structural then by nonstructural methods and using educational and programming management.

The final conclusion is that the alternative plans that were presented were quite comprehensive in that they considered the problems in depth had planned measures or results with both beneficial and adverse effects with the tradeoffs and constraints, and again it will be most beneficial to compromise with using the Economical Development and Environmental Quality Plans.

Group 4
Moderator: Karen Griggs
Recorder: Ethyle R. Bloch

The discussion started on the Land Resources component. Although no one in the group was a farmer and we could perhaps not legitimately speak for him, the general feeling was that farmers are sympathetic to the wise use of land resources. However, it was felt that the time may come, if not now, where farmers will need to be forced into planning. Tax incentives to save prime agricultural land are in order. Another way

of saving prime ag land is by buying development rights. However this should be protected with the provision that county commissioners do not turn around and sell the land.

Planning should be concentrated within reach of available services, for instance, a development without adequate sewer plans is a "no-no".

The question was asked "What is the authority of this Group? How will this Plan Study be implemented? Is the federal government mandating this program so that federal funds will be available?

Mr. Gregorka was called in for an answer. He stated the Maumee Basin Study is a component of the Great Lakes Basin Commission, and the plan is not a mandate on the governmental units of an area. The procedure involved is to produce a plan for the people to be happy with and to solve their problems. After approval, the Plan will go to Congress and will then serve as a guide to the various agencies for coordination purposes. Federal guidelines will set up programs with incentives.

A compromise of the EQ and ED plans could result in an overall plan which citizens will pay for and which will be of benefit to all citizens. Therefore we want the best plan, environmentally, but have to consider the costs. There was a concern that a mandate might be necessary to really clean up the environment.

There was general agreement that all costs of this plan cannot be quantified, such as aesthetic enhancement and health costs. However we cannot ignore costs of health, if, for example, our water quality is degraded. These costs were not considered or made any part of any of the three alternatives.

Overpopulation can drastically affect recreational needs. The plans say put more boats on the streams--and that leads to bank erosion. One official present stated that the term "boat" excluded power boats, therefore no problems. Question: What do we do with the power boats now in use? Prohibit them?

Flood plain management and acquisition of undeveloped flood lands rather than structural improvement within Fort Wayne was the decision on the flooding and drainage component portion. Structures don't always protect anything. Flood control must start as far up in the watershed as possible to hold the water there through good land practices, forest sponges; this would in turn increase the aesthetic value of all the land. The question was asked, "Why encourage drainage just to aid farming and builders of highways and injure society? Why should the farmer always have his way to drain all his land without considering other problems? He is looking only at the dollar value for his agribusiness and yet the cost will be paid by all".

There must be continued improvement in the administration of federal grants. Industries will most likely be cleaned up by the 1985 deadline of PL 92-500, but municipalities won't be. If cities don't meet water quality requirements and compliance schedules, what's the answer? Put the mayors in jail? We need to do as much as possible now because of rising costs of materials and labor. We want equity in these payments to conquer the problems, but we either pay the dollars or suffer degradation.

The large number of acres to be acquired for public access for hunting on private land was questioned--private access will be difficult to obtain as hunters are always a problem (The Study relies on the individual local agencies solving these nitty-gritty problems). A vote was taken showing that the majority favored natural areas and wildlife protection but were against permitting access to hunters. In general, hunters are a major behavior problem.

Not one person was in favor of snagging and clearing Cedar Creek, and we questioned why Cedar Creek was excluded from this Study for scenic stream designation.

The alternatives for water quality are a sell-out of PL 92-500. The costs are not true, are not high enough, especially for the ED plan. Most of the goals for Water Quality established by the Advisory Committee were not included in either alternative. WHY? It is important that they be included. It is vital to the environment that we meet the terms of the 1972 amendments to the Federal Water Pollution Control Act of zero discharge by 1985.

Group 5
Moderator: Jim Haddock
Recorder: Mark Rondot

The first point of discussion dealt with the location of the 1,500 acres designated for Dekalb County and southern Allen County. It was stated there has been no exact location picked as of yet, so there were suggestions to run it parallel with the river instead of perpendicular and cutting into prime agricultural land.

Next the group dealt with Recreation and Fishing. Here the group could not come to accept either plan totally, but suggested that you use parts of both the Economic Development Plan and Environmental Quality Plan to come up with a plan that will best serve the people. This way it would still incorporate the access sites to the

river, which the group thought was a necessity. Also the group was not sure of the definitions of clearing and snagging, so did not pursue the topic any further.

Wildlife and Hunting was the next topic discussed by the group. There was no general consensus on this question, but the group was concerned about the comparative cost of the two approaches and also about the incentive programs to help ease the shortage of public hunting land.

The final point of discussion was the Erosion-Sedimentation problem. Here the group all agreed that greenbelts should be grown to cut down on erosion and sedimentation and also heop preserve the natural habitat. So as the general consensus on the erosion, sedimentation and water quality, the group agreed that the Environmental Quality Plan was more consistent with the goals in mind as they discussed the Recreation-Fishing, Wildlife-Hunting problems, because it called for 40% erosion control and held more for the preservation of the natural habitat.

DEFIANCE

Group 1 & 2
Moderator: Albert Schroeder
Recorder: Kenneth W. White

The major point brought out at this meeting, of which the entire group agreed, was that the selected plan must consist of a compromise between the environmental and economic alternatives. The feeling was, that to consider only economic growth and expansion would be very detrimental to the overall condition of the basin. However, some type of modified economic growth is necessary to maintain a high standard of living for the future and also support progress in improving the environmental conditions. One must not be totally sacrificed for the other.

The second major point of concern was that of the selection and implementation of a final Plan. These people felt, very strongly, that the major decisions should be made at the local level. However, with the realization that decisions made in one area affect those in other areas, it was stated that the local decision making should not be allowed to go to extremes. In order to prevent this, people from throughout the basin should be allowed some input to the decision making so their views could be considered.

Finally, there was some skepticism expressed by a few that this study will become another useless waste of time, money, and paper gathering dust on some shelf.

Group 3
Moderator: Tom Schultz
Recorder: Steve Mohr

In the opening discussion, there was much concern as to, if and when, the program was implemented if there would be any flexibility in the rules and regulations. Many persons in the room felt that they did not understand the purpose on structure of the CAC. This question was quickly cleared up by a resource person in the meeting. The explanation was such that the CAC is one of three levels. Level A is a basically frame work study, Level B is a study to provide overall direction, and Level C is the implementation stage of the structure. This helped answer the question above relating to the flexibility of the study. Arising from this was the fear that the Level B study would be book-shelved and never used. It was explained that this would be the responsibility of the Level C committee.

The group then got down to the business at hand and discussed the three options that were available; Economic, Environmental, and the Plan C No Change Option, as related to land use, erosion, and sedimentation.

On the Economic question, it was felt by some of the participants present that Economic Development in this community (probably meaning rural) would be received better by the populace than the Environmental Quality approach.

On the Environmental Quality Approach, the participants were quick to point out that people cause the problem. On the more serious side, as related to resource management, it was strongly felt that Prime Agricultural land must be kept in production and that land of lesser productivity should be used to develop the recreational needs of society.

Plan C, no change option, was received in somewhat of a negative view. It was felt that urbanization of the rural areas are already megalopolis. It was pointed out that there are plans now in existence which

deal with the same problems which we are considering. It was also pointed out that the Study Level B or CAC is attempting to pull these diverse elements together into a unified comprehensive plan to give direction as to what we want to do as a society.

As time was running short, a quick survey was directed by Mr. Schultz. The results were as follows:

Land Resources Management - Economic Development-4, Environmental Quality-5, Plan C-1

Erosion and Sedimentation - Economic Development-7, Environmental Quality-1, Plan C-0

In summary, it was felt that if and when a plan is implemented that it will have to be at a cost which is economically feasible. The overall feeling of the group was that it was very hard to make a judgment with the facts and background with which the group had to work with during the session.

Group 4
Moderator: Gino Silvestri
Recorder: Paul H. Jones

1. Flooding Problems - Local units of Government should use all existing statutes and funding to correct problems in ditches and streams.

2. More citations should be given by EPA to polluters.

3. Equal treatment under the law should be given i.e., municipalities are required to test effluents and have licensed treatment plant operators whereas private installations, motels, trailer parks, and schools are not.

4. Subdivision regulations, particularly the Sacre Lot Exception, should be revised and strengthened.

Group 5
Moderator: David M. Schumm
Recorder: David M. Schumm

Comparing the two Wildlife and Hunting alternatives, our group (5 persons) favored an incentive program much like the public access program which worked so successfully in Michigan. Private landowners would be given incentives to provide hunting opportunities on their properties. The Michigan landowners liked the program, partly because they still had control over their own property. It was felt that the purchase and management of public hunting lands had several disadvantages, among them being that not as much land could be made available, that the management might be influenced politically and the quality therefore fluctuate, and that public lands would not offer as good of an all-around quality of hunting environment as private lands. The group agreed that hunters would get more for the money spent, especially considering high land prices in this area, if the incentive program was utilized instead of the public land purchase and management program.

Comparing the two Recreation and Fishing alternatives, the group seemed to favor strongly the EQ alternative over the ED alternative. EQ provides for more land and a more varied spectrum of recreation facilities. The group felt that it was very important to preserve natural areas as well as the high density type areas. Someone stressed that it was very important to save what few natural areas there are still left before they were gone and before we lose the chance of passing on these pieces of rich natural heritage to future generations.

NAPOLEON

Group 1 & 2
Moderators: Bill Hensley, Ernie Vorwerk
Recorder: Agnes M. Hooley

3 main plans - 1) As is plan if present status, 2) Economic Development, 3) Environmental Quality

Henry Co. Planning Subarea 3 - P. 33-37 was designated as our primary focus for group discussion (Alternative Plans Book). The chairman brought out the main goals and directions for each plan.

Several were concerned about preservation of good agricultural land as both environmental and economic; both are involved. Wise planning and use of land so that it is utilized for its best potential, whether agricultural,

industrial, recreational is a good policy. We need zoning boards with authority, backed by a public with enlightened attitudes. People tend to choose better when directed by laws and information.

The vote - Land Resources Management

75%	favored	25%
EQ Plan		ED Plan

Erosion and Sedimentation

Practices such as "minimum tillage" (as related to drainage, crop production), and "leaving the veg. on top surface" were discussed. Various opinions are held on the efficiency of such practices. Sentiment was expressed by several persons that farmers have increased the use of good farming practices during the past several years in Subarea 3, due to the availability of information, and the productive gains made through such practices. Considerable difference of opinion exists on the effects of certain problems such as sheet erosion and the efficiency of the practice of "minimum tillage" or "no till". No vote could be secured from the group members. It is felt that terms need to be better defined and data brought up to date first. It was agreed that all should use proven conservation practices in farming.

Water Quality

Water cannot be completely pure, but must reach a certain quality to support life. Control erosion and sedimentation and you will insure good water quality.

The vote went toward Economic Development

Wildlife and Hunting

Maintenance of agricultural woodland was recommended.
The vote was 7 to 2, several abstentions for Environmental Quality.

Group 3
Moderator: Robert Cole
Recorder: L.A. Box

Discussion meeting was set into motion by Mr. Cole explaining the topics to be discussed, after which questions were asked by local individuals concerned with how they might be affected by the ED and EQ plans.

The discussion was primarily centered on minimum and no till land preparation as opposed to the once traditional plowing, discing, and rolling method. The pro's and con's of each were presented, and it must be noted that no particular agreement was reached, for each side had substantial arguments to support their beliefs.

The main comments supporting minimum and no till operations were as follows:

A. Less soil erosion to main water arteries
B. Savings in the amount of fuel consumed to plant crops
C. Overall land preservation

The maincomments opposed to minimum, and no till operations were as follows:

A. Not all areas are suitable for minimum and no till operations, due to the heavy consistancy of the soil. Certain areas require more preparation prior to planting.
B. Although a savings in fuel costs may be realized, minimum and no till operations require greater applications of herbicides and pesticides which add additional expenses to the farmer.

Some comments and opinions concerning land management and erosion and sedimentation were voiced with future interest in mind, while others were primarily concerned with the present. Many had questions on funding, and seemed hesitant to accept further enforcements of any kind.

Land Resource Management, Erosion and Sedimentation

At the beginning of the discussion it was the intent of the moderator and recorder to strive for a group consensus on certain points. However, this was not accomplished due to the conflicts of interest of the groups represented. However, it was noted that all realize the problems facing our environment, as well as our economic developments and the majority felt that both are important, and the ED and EQ plans could be utilized to work together, in the best interest of all concerned.

Napoleon

Group 4
Moderator: H.H. Salsbury
Recorder: M.N. Maringer

A short discussion was held on the quality of the water past and present, and also, what quality water do the people want in the future. It was pointed out the main difference between EQ and ED alternative was the control of non-point sources of pollution. Since most of the persons in attendance were farmers the discussion led to methods that could prevent their soil and fertilizers from entering streams. Following area a few of the different methods suggested:

A. Special farm management
B. Minimum tillage
C. Grass strips
D. Permanent pastures
E. Correct fertilizer application

It was pointed out that the above items could be accomplished without economic loss to the farmer by tax incentive programs, and a decrease in fertilizer and land loss. After much discussion it was decided by the group that they preferred the EQ alternative, but question the controls on the non-point polluters. They felt that the controls set up should be reasonable to live with, and would recommend that persons representing each of the non-point polluters be able to have some voice in setting the standards.

The second topic discussed was flood plains and controls. The main questions were how to control creek flooding and what to do with flooded areas. Suggested solutions were:

A. Retention Dams
B. Holding Reservoirs
C. Clear and Snag
D. Channel deepening and widening

Water Quality, Water Supply, Flood Plains

After the discussion the group favored the ED alternative, however it was felt that all streams should be kept open for agriculture drainage, which would include snagging and removing sediment where necessary. According to the map on page 33, the group noticed the lower part of the Tiffin River would be considered as a wild and scenic river, which would not allow any type of cleaning. They felt some cleaning should be allowed in the lower part or this area would be completely flooded after the upper portion is cleaned as shown on the map.

Group 5
Moderator: Dave Reed
Recorder: Sylvia Salsbury

1. This group expressed concern for habitat destruction and the subsequent wildlife decline. The Environmental Quality approach should be followed to preserve the wildlife.

2. It was agreed that since our rivers and streams are all we have - and the wildlife along these rivers and streams - that further channelization would not be advisable.

3. Our woodlands should stand and additional incentives should be provided to encourage preservation. Incentives in addition to the present law which allows 50 per cent reduction of tax for declared preserved land.

4. Fish ladders should be included at dams regardless of which program is implemented.

5. More consideration should be given to fish stocking in this subarea 3.

6. Our natural areas should be preserved for outdoor recreation. The EQ plan is preferred over the ED plan. It was agreed that we preserve our wildlife areas for our children's future and those areas should be purchased.

7. There is a need for more camping facilities for outdoor recreation in this area which would also advance economic development.

8. In addition to added camping areas, more adequate and quality docking facilities area needed.

ADRIAN

Group 1 & 2
Moderator: Norman Bless
Recorder: Dyle Henning

Moderator notes cost difference in plans is about $1,300,000 per year over a period of 15 years.

-One problem: How to make economic incentives fair to those who receive and those who don't?

+Agree that land is limited, perhaps need to use less suitable agricultural lands (eg. in Hillsdale) to develop structures (housing, etc.) intensively.

-Find trends in growth in rural areas as many people try to get away from larger cities.

+Agree that all believe we need more long-term planning. Recommend that knowledgable elected officials be brought in so that people with power to decide hold same values.

First feeling of group is that some feel that ED is best, none think EQ is and most feel the best may be to take parts of ED & EQ. This was general feeling at the end of the session as well.

In Planning Subarea 1, there is gross soil erosion. Perhaps don't have to deprive farmers of fall plowing, but should get farmers to leave things on the soil (mulch plowing, etc.) and should use heavy grass filter strips near any water areas. Ground here is not ready for no-till but minimum tillage could be used. Larger farmers are probably more ready for setting aside more grass and for using "better" (eg. no-till) equipment. Question-should farmer have to bear cost or should incentives be given?

Right now a lot planning going on. Other plans besides where's the money going to go? How to get action on what things first?

Thus, for land management we favor a middle approach between EQ and ED.

For Erosion and Sedimentation, general agreement to support EQ approach. But has to include also good drainage practice (tiling, etc.).

Water Quality - not as much a problem in Michigan area (Bean Creek). Seems to be a split in feeling about whether to support EQ or ED. Many see something in between.

Flooding - In Subarea 1, EQ would minimize flooding in our area and areas below. We would also encourage use of P.L. 566. Areas below find sedimentation problem linked to flooding, i.e., more sedimentation below means more flooding below.

Recreation, fishing, wildife and hunting - There are other means for developing these things elsewhere. The private sector can get involved in providing opportunities (hunting preserves, etc.). General feeling to support of ED approach to this but opinion also to contrary. Try to provide more intensive use of resources for recreation.

If it comes to a choice between recreation-wildlife-hunting category and others, others may be more important because there are no alternatives. Recreation-wildlife, etc. does have alternatives in other activities and in private development.

Group 3
Moderator: Jacob Venema
Recorder: Dale Storrer

Land Use

Incorporate local (township, county) zoning ordinances as a part of the Basin Program as each local unit may differ in its own intentions. (a) Much time was spent in looking towards the incentives that would keep "agricultural land" in farms rather than let it become "urbanized" (tax breaks, etc.). This is a tough problem!

Erosion and Sedimentation

We back all basic efforts to minimize the loss from erosion: i.e., no till farming - grass strips, etc. BUT we also feel, again, that some incentive may be needed for compliance. (a) The EQ plan was applauded and backed. (b) Questioned the discussion of erosion in forests?? The group agonized over the clearing and snagging of the Tiffin River. (a) Yes - clear debris etc. BUT no don't bother the banks or change the channel.

Adrian

(b) Dikes - treatment for them is different than regular in bank part of waterway - so special treatment may be needed: i.e., sod only (no trees) on dikes, etc.

Most discussion on the point of land use: "Make it possible for farmers to afford to farm the agricultural lands".

Group 4 & 5
Moderator: Dan Bruggeman
Recorder: Tom Thrall

Since farming too close to the ditchbanks seems to be a problem, it was felt that some relief to farmers in the way of tax break for leaving a filter strip might help the situation.

A farmer member of the group discussed the serious flooding problem he has. He is located in Ohio just over the Michigan line. Several of his tile outlets are now under sediment. He also mentioned that the Tiffin River below Morenci was a made channel to the Ohio line.

It was mentioned that some form of channelization might help the situation, but there is no easy solution.

One member indicated that channelization would have adverse effects on fish, especially Northern Pike. The Pike have a natural spawning area in the Tiffin River.

A representative of the Bean Creek Nature Sanctuary indicated that the 55 acres is extremely valuable because of several rare plants and because of the wide variety of trees. This group would strongly oppose any plan which would alter the nature area.

A canoeing member indicated the canoeists would like some limited clearing and snagging done so they could get through.

All members were in agreement that they would favor preservation of unique natural areas as they can never be replaced.

It was brought out that it was not desirable to have several moderately used parks which could combine heavy recreation and natural areas use. Instead, development should be carefully planned for recreation at a certain few sites that could be supervised properly. It was felt that natural areas can be destroyed by too much development.

In regards to hunting, the group felt that it was better to compensate farmers to allow hunting and other recreation rather than for the state to purchase a lot of land for this purpose. There have been some people problem on existing state lands where there is no proper supervision.

It was also agreed that all future construction in the flood plain be eliminated. The problem however, is identifying the flood plain.

4
SUMMARY OF QUESTIONNAIRE RESULTS

This section briefly summarizes the results of the questionnaire mailed to everyone on the Maumee mailing list during the latter half of January 1976. The questionnaire was designed to give members of the general public an opportunity to express their viewpoints and to comment on the Maumee Level B alternatives. The results of the questionnaire, as well as of the forums and written statements, are used by the Maumee Planning Board to finally develop the plans for the Maumee Basin and Bay for consideration of governments at all levels.

The more than 400 responses received represent a reasonably good cross-section of the Basin population in regard to occupation, age, and period of residency. Farmers comprised 20 percent of the respondents, professionals 52 percent, other employed persons 14 percent, and others including retirees 14 percent. Analyzed by age group, 25 percent of the respondents were under 30 years of age, 40 percent 30-50 years of age, and 35 percent over 50 years. Of the total sample, 71 percent had lived in the Basin for more than 15 years, 14 percent 5-15 years, and 15 percent for less than five years. Fifty-four percent indicated they had attended a public forum on the Basin plan in January. Highly varied write-in comments accompanying the questionnaire also support the contention of a diverse sample.

Maumee Basin residents were asked to rate each of nine resource issues by general priority and then to rate specific programs within each resource category on a scale of least to most preferred. The nine resource issues were land resources, erosion, water quality, fisheries, wildlife, recreation, urban and rural flooding, and Bay problems.

QUESTIONNAIRE EVALUATION

As shown in the summary evaluation for Part I, erosion and sedimentation, water quality, and land resource management rated the highest among the general priorities, with 74, 72, and 65 percent above medium, respectively. The second priorities appeared to lie in the areas of rural and urban flooding and Maumee Bay, with 46, 45, and 42 percent. Receiving the lowest priority were outdoor recreation, fishing, and wildlife and hunting with 31, 22, and 20 percent respectively.

Of the specific programs listed as alternative strategies for dealing with problems within these policy areas, high levels of wastewater treatment, erosion control, and regulation of continued land use were highly favored. Specifically, 84 percent of Basin respondents wanted wastewater treatment to upgrade water quality and insure there is an adequate supply of good water for domestic and industrial uses. Another 83 percent attached high preference to controlling gross sheet erosion and severe bank erosion to minimize losses to wildlife, sediment production and water pollution. An equally large number, 83 percent, favored good land resources management which would regulate growth patterns in accord with land capabilities based on detailed land and water resource inventories.

PLANNING SUBAREA 1

In general priority, water quality, land resources management, and erosion and sedimentation rated the highest, at 90, 73, and 72 percent respectively.

In specific programs, the highest preferences were for controlling both point and nonpoint sources of water pollution, increasing regulation to foster preservation of prime agricultural land and regulate growth patterns in accord with land capabilities.

PLANNING SUBAREA 2

In general priority, erosion and sedimentation, water quality, and land resources management rated the highest, at 83, 78, and 71 percent respectively.

In specific programs, 92 percent of PSA 2 respondents wanted wastewater treated to upgrade water quality to insure there is an adequate supply of good water for domestic and industrial uses. Only slightly fewer respondents, 85 percent, attached high preference to controlling sheet erosion and severe bank erosion to minimize losses to wildlife, sediment production, and water pollution. Of the total sample, 81 percent favored instituting urban erosion control programs, especially at construction sites, to reduce sedimentation and water pollution. Almost as many, 80 percent, felt preservation of prime agricultural land by increasing regulation of land use practices of private owners and developers was important.

PLANNING SUBAREA 3

In general priority, erosion and sedimentation at 70 percent, land resources management at 61 percent, and water quality at 60 percent rated the highest for general problem areas.

In specific programs, 86 percent of PSA 3 respondents preferred controlling erosion to the extent justified by net benefits produced by erosion control. In this PSA, 85 percent wanted wastewater treated to upgrade water quality to insure there is an adequate supply of good water for domestic and industrial uses. Another 78 percent also felt nonpoint sources of pollution should be controlled.

PLANNING SUBAREA 4

In general priority, respondents from PSA 4 rated water quality at 71 percent, erosion and sedimentation at 70 percent and land resources management at 60 percent.

For specific programs, 77 percent of PSA 4 respondents preferred upgrading water quality to insure there is an adequate supply of good water for domestic and industrial uses, and 69 percent felt a need to concentrate on identifying and controlling point source pollution. Next in order, 66 percent preferred controlling erosion and severe bank erosion to minimize losses to wildlife, sediment production, and water pollution.

PLANNING SUBAREA 5

In general priority, PSA 5 respondents rated water quality and erosion and sedimentation at 77 percent, land resources management at 65 percent, and Maumee Bay at 53 percent. This indicates that even Toledo residents are not so much concerned about Maumee Bay as they are with erosion and sedimentation, water quality, and even land resources management.

For specific programs, 85 percent of PSA 5 respondents gave high priority to wastewater treatment which would upgrade water quality to insure there is an adequate supply of good water for domestic and industrial uses. Next in order, 81 percent preferred controlling gross sheet erosion and severe bank erosion to minimize losses to wildlife, sediment production and water pollution. Almost as many, 80 percent, felt substantial effort should be made to control both point and nonpoint sources of pollution. In this PSA 65 percent of respondents felt Maumee Bay should stress improvement of environmental conditions and limit economic development (Fort Wayne area respondents [PSA 2] felt more concerned for Maumee Bay environment, with 70 percent saying so).

SUMMARY OF QUESTIONNAIRE RESULTS — PART I — Maumee River Basin Level B Study

Percent of People Rating Priorities for Resource Problems
(Remainder up to 100 percent-No Opinion)

	Basin		PSA 1		PSA 2		PSA 3		PSA 4		PSA 5	
	Above Medium	Below Medium	Above Medium	Below Medium	Above Medium	Below Medium	Above Medium	Below Medium	Above Medium	Below Medium	Above Medium	Below Medium
LRM	65	13	73	18	71	11	61	17	66	11	65	12
E&S	74	9	72	0	83	7	70	8	70	9	77	11
WQ	72	6	90	0	78	4	60	9	71	7	77	5
Fish	22	39	19	63	32	34	15	46	20	40	25	34
W&H	20	43	27	63	31	35	16	44	21	47	16	41
O Rec	31	27	45	45	36	32	21	32	40	26	24	24
RF	46	50	46	27	36	25	50	19	49	18	46	17
UF	45	20	18	36	37	11	42	24	50	19	50	18
MB	42	18	55	27	44	9	32	22	39	18	53	16

PART II

Percent of People Stating Preference to Options for Programs

Question No.	Basin			PSA 1			PSA 2			PSA 3			PSA 4			PSA 5		
	Preferred More	Preferred Less	No Preference	Preferred More	Preferred Less	No Preference	Preferred More	Preferred Less	No Preference	Preferred More	Preferred Less	No Preference	Preferred More	Preferred Less	No Preference	Preferred More	Preferred Less	No Preference
LAND RESOURCES MANAGEMENT																		
1(a)	71	15	14	91	9	0	80	13	7	75	16	9	63	18	19	70	13	17
(b)	55	20	25	73	9	18	64	15	21	35	33	32	50	22	28	65	14	21
2(a)	55	15	30	46	36	18	55	14	31	58	20	22	56	13	32	59	11	30
(b)	38	20	42	36	46	18	30	24	46	42	21	37	39	14	47	38	21	41
3	70	12	18	82	0	18	82	11	7	71	12	17	65	13	22	70	9	21
4	34	35	31	27	55	18	29	46	25	35	29	36	44	32	28	28	37	35
5	64	17	19	82	0	18	72	20	8	61	17	22	60	18	22	62	13	25
6	9	72	19	0	100	0	8	80	12	7	79	14	13	66	21	8	71	21
7	58	21	21	82	9	9	61	27	12	44	31	25	54	18	28	68	12	20
8	27	48	25	28	72	0	8	69	23	24	38	38	40	32	28	18	58	24
EROSION AND SEDIMENTATION																		
1	83	10	7	72	9	19	85	7	8	66	13	21	66	12	22	81	8	11
2	33	35	32	9	55	36	24	45	31	45	25	30	39	30	31	26	41	33
3	18	57	25	0	73	27	12	67	21	20	56	24	21	45	34	15	65	20
4	50	23	27	73	0	27	59	14	27	41	31	28	46	27	27	53	18	29
5	21	27	52	55	18	27	51	37	12	38	30	32	49	27	24	46	28	26
6	68	14	28	73	18	9	81	8	11	65	14	21	60	17	23	72	12	16
7	11	68	21	9	74	17	7	75	18	13	66	21	10	64	26	13	71	16
8	64	13	23	82	9	9	64	10	26	60	16	24	43	25	32	73	7	20
9	51	18	31	37	9	54	53	14	33	86	11	3	45	22	33	55	16	29
10	30	36	34	18	46	36	25	50	25	42	22	36	33	29	38	24	45	31
WATER QUALITY																		
1(a)	84	5	11	91	9	0	92	2	6	85	5	10	77	7	16	85	3	12
(b)	49	20	31	55	18	27	43	29	28	59	9	32	54	18	18	42	25	33
2(a)	53	18	29	82	9	9	61	13	26	45	26	19	47	20	33	59	10	31
(b)	48	21	31	55	18	27	58	19	23	36	33	31	37	25	38	57	18	25
(c)	36	25	39	45	18	37	44	29	27	30	30	40	35	19	46	36	27	37
3	77	5	18	64	0	36	77	5	18	78	3	19	79	8	13	77	8	15
4	69	15	16	100	0	0	78	9	13	57	30	13	65	12	23	80	9	11
FISHERY																		
1	26	19	55	18	37	45	29	27	44	20	39	41	25	25	50	31	27	42
2	37	21	42	37	18	45	38	24	38	42	19	39	36	22	42	35	20	45
3	18	30	52	9	18	73	13	31	56	28	25	47	16	30	54	18	35	47
4	36	22	42	46	27	27	31	23	46	54	9	37	30	23	47	31	26	43
5	39	24	37	55	9	36	42	27	31	37	27	36	35	23	42	54	22	24
6	42	22	36	46	9	45	44	29	27	42	29	29	35	23	42	49	12	39
WILDLIFE AND HUNTING																		
1	56	16	28	73	9	18	66	13	21	54	21	35	50	21	39	59	9	32
2	7	55	38	9	55	36	6	65	29	7	51	42	9	50	41	3	60	37
3	23	34	43	9	36	55	16	49	35	28	33	39	31	25	44	15	38	47
4(a)	45	25	30	64	9	27	43	37	20	57	25	18	44	23	37	38	23	39
(b)	33	35	32	37	36	37	49	23	28	25	48	27	30	29	41	34	36	30
5	16	41	43	18	55	27	3	7	90	15	40	45	18	36	46	16	41	43
6(a)	17	38	45	9	55	36	13	47	40	18	39	43	20	32	48	47	21	32
(b)	43	20	47	46	9	45	51	14	35	36	36	28	44	17	39	47	21	32
(c)	32	25	43	18	9	73	33	26	41	29	33	48	32	22	46	35	23	42
OUTDOOR RECREATION																		
1	49	25	26	46	18	36	61	16	23	39	31	30	39	28	33	63	22	15
2	40	30	30	46	36	18	41	35	24	38	19	43	49	26	25	32	38	30
3	51	18	31	64	18	18	58	20	22	42	22	36	51	15	34	52	16	32
4	33	31	36	46	27	27	45	26	29	24	39	37	24	35	41	41	23	36
5	65	16	19	82	0	18	73	16	11	52	27	21	62	13	35	71	9	20
6	14	59	27	0	73	27	6	67	27	21	45	34	14	58	28	10	67	23
RURAL FLOODING																		
1	46	33	21	45	37	18	39	43	18	52	26	22	55	24	21	34	42	34
2	51	19	30	36	28	36	38	32	30	58	18	24	53	15	32	56	14	30
3	45	27	38	64	9	27	42	36	22	48	17	35	46	27	27	43	27	30
4	20	45	35	27	18	55	34	32	34	13	52	35	13	54	33	25	40	35
5	67	14	19	73	0	27	72	13	15	58	15	27	64	15	21	79	9	12
6	22	52	26	18	64	18	19	64	17	27	37	26	29	44	27	13	68	19
URBAN FLOODING																		
1	62	16	22	73	18	9	78	11	11	49	24	27	58	19	23	71	9	20
2	43	26	31	46	27	27	25	43	32	54	16	30	52	19	29	35	32	33
MAUMEE BAY																		
1	58	14	28	64	0	36	70	8	22	52	15	33	52	15	33	65	16	19
2(a)	36	21	43	27	0	73	40	23	37	34	19	47	36	19	45	38	24	38
(b)	50	14	31	18	27	55	45	6	49	54	11	35	51	10	42	54	19	27
(c)	30	30	40	18	37	45	30	37	33	41	19	40	30	26	44	24	42	34

CHOICES FOR THE MAUMEE BASIN: A QUESTIONNAIRE

As an individual interested in land and water resource issues facing the Maumee Basin, you have previously received a booklet entitled "Alternative Plans for Public Action," presenting detailed information on the Basin's resource problems and on some alternative ways in which the people of the Basin can solve these present problems and meet future resource needs.

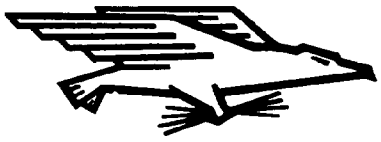
This questionnaire is an effort to determine more specifically your preferences among these various approaches and solutions. The opinions you express through this questionnaire and the scheduled Public Forums, together with written review comments by the public and other study participants, will be used by the planners and members of the Citizens' Advisory Committee to develop a selected plan. The Great Lakes Basin Commission will consider these views in recommending a final plan.

To aid you in answering the questionnaire, we have enclosed a display of two alternative plans: one emphasizing environmental quality and the other emphasizing economic development. For each issue addressed by the plans, the display summarizes the specific problems, planned measures for their solution, expected results, beneficial and adverse effects of these measures, trade-offs between various results, and possible constraints limiting what can be achieved.

We hope you will complete the questionnaire thoughtfully, since knowledge of your true preferences will help us ensure the viability and acceptability of the final plan.

INSTRUCTIONS

This questionnaire is divided into three parts (I, II, and III). Please fill out all three parts. If you have no opinion on a question simply leave it blank. When you have completed the whole questionnaire, please fold it so that our address (below) is on the outside. Then staple or tape it firmly, and drop it in a mailbox. Postage will be paid. We would appreciate receiving your questionnaire by January 28, 1976.



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Great Lakes Basin Commission

GREAT LAKES
BASIN COMMISSION
P.O. BOX 999
3475 PLYMOUTH ROAD
ANN ARBOR, MICH. 48106

ATTENTION: Maumee Study Manager

staple here

PART I

Please rate the resource issues below according to your estimate of their relative importance, using the priority rating scale below. Your opinion will enable us to determine which issues you feel are the most critical and should be given priority consideration in the final plan.

PRIORITY RATING SCALE:

1	2	3	4	5
High		Medium		Low

(circle one)

1 2 3 4 5 Land Resources Management

1 2 3 4 5 Erosion and Sedimentation

1 2 3 4 5 Water Quality

1 2 3 4 5 Fishery Resources

1 2 3 4 5 Wildlife and Hunting

(circle one)

1 2 3 4 5 Outdoor Recreation

1 2 3 4 5 Rural Flooding

1 2 3 4 5 Urban Flooding

1 2 3 4 5 Maumee Bay Problems

PART II

Please note that this part is also divided into the nine resource categories, with one or more components listed beneath each. Some components are divided into options that may be considered in the ENVIRONMENTAL QUALITY alternative or in the ECONOMIC DEVELOPMENT alternative. Please use the scale shown below to state your preferences regarding the method of addressing the issue, and include any pertinent comments you might have in the space provided. If you need more room for your comments, please feel free to attach an extra sheet.

PREFERENCE SCALE:

1	2	3	4	5
Prefer Most		Neutral		Prefer Least

Land Resources Management

(1) Increase regulation of the land use practices of private owners and developers in order to foster preservation of:

(circle one)

1 2 3 4 5 .....(a) prime agricultural land.

1 2 3 4 5 .....(b) ecologically sensitive areas.

(2) Regulate land use in the private sector only to:

1 2 3 4 5 .....(a) insure the health and safety of the public.

1 2 3 4 5 .....(b) minimize costs and protect public investments in water resources facilities.

1 2 3 4 5 .....(3) Regulate growth patterns in accord with land capabilities based on detailed land and water resource inventories.

1 2 3 4 5 .....(4) Encourage growth to provide jobs and economic benefits.

1 2 3 4 5 .....(5) Provide financial incentives to encourage preservation of prime agricultural land.

1 2 3 4 5 .....(6) Convert prime agricultural land to other uses to take advantage of economic opportunities such as increased employment and an expanded tax base.

1 2 3 4 5 .....(7) Provide financial incentives to encourage preservation of ecologically sensitive areas.

1 2 3 4 5 .....(8) Allow development of ecologically sensitive areas where economically advantageous.

(9) Comments: _____

_____

_____

Erosion and Sedimentation

1 2 3 4 5 .....(1) Control gross sheet (overland) erosion and severe streambank erosion to minimize loss of wildlife habitat, loss of scenic areas, sediment production, and water pollution.

1 2 3 4 5 .....(2) Control only streambank erosion, to minimize costs and interference with net farm income and productivity.

1 2 3 4 5 .....(3) Foster change in cropping practices to maximize farm production and income while accepting soil losses which might reduce future productivity.

1 2 3 4 5 .....(4) Require changes in cropping practices to reduce agricultural erosion to or below a tolerable soil loss level (accepting reduced production).

1 2 3 4 5 .....(5) Subsidize changes in cropping patterns to reduce agricultural erosion to or below a tolerable soil loss level.

1 2 3 4 5 .....(6) Institute urban erosion control programs, especially at construction sites, to reduce sedimentation and water pollution.

1 2 3 4 5 .....(7) Do without urban erosion control programs.

1 2 3 4 5 .....(8) Control erosion to reduce sediment deposition in navigation channels and the need for dredging and spoil disposal.

1 2 3 4 5 .....(9) Control erosion to the extent justified by net benefits produced by erosion control.

1 2 3 4 5 ....(10) Control erosion to the extent justified to maximize on-farm profits.

(11) Comments: _____

_____

_____

Water Quality

(1) Upgrade water quality in the Basin to insure:

1 2 3 4 5 .....(a) that there is an adequate supply of good water for domestic and industrial uses.

1 2 3 4 5 .....(b) that economic benefits and costs are balanced.

(2) Upgrade water quality in the Basin in a cost-effective manner to:

1 2 3 4 5 .....(a) protect fisheries.

1 2 3 4 5 .....(b) permit full body contact recreational uses such as swimming.

1 2 3 4 5 .....(c) permit partial body contact uses, such as boating.

1 2 3 4 5 .....(3) Concentrate on identifying and controlling point sources of pollution, such as municipal and industrial wastewater treatment plants.

1 2 3 4 5 .....(4) Make a substantial effort to control not only point sources of pollution, but to develop a program for nonpoint sources of pollution including storm water retention, erosion control, and control of feedlots, and fertilizer and pesticide application rates.

(5) Comments: _____

_____

_____

Fishery Resources

1 2 3 4 5 .....(1) Provide a large number of fishing access sites in the Basin to fully utilize the Basin fishery.

1 2 3 4 5 .....(2) Provide fewer access sites, but concentrate on other management strategies to provide fishing opportunities.

1 2 3 4 5 .....(3) Do not increase number of access sites.

1 2 3 4 5 .....(4) Limit the number of access sites to those having much greater net benefits than costs.

1 2 3 4 5 .....(5) Conduct fishery studies if improved water quality does not naturally reinstate a sport fishery.

1 2 3 4 5 .....(6) Analyze optimum fishery management needs.

(7) Comments: _____

_____

_____

Wildlife and Hunting

1 2 3 4 5 .....(1) Increase wildlife habitat in the Basin.

1 2 3 4 5 .....(2) Decrease wildlife habitat in favor of other uses.

1 2 3 4 5 .....(3) Maintain existing habitat only.

(4) Increase public access to wildlife habitat through:

1 2 3 4 5 .....(a) private incentive programs.

1 2 3 4 5 .....(b) public acquisition, management, and development.

1 2 3 4 5 .....(5) Do not increase public access areas.

(6) Increase public access to wildlife habitat for:

1 2 3 4 5 .....(a) hunting.

1 2 3 4 5 .....(b) non-hunting uses.

1 2 3 4 5 .....(c) both hunting and non-hunting uses.

(7) Comments: _____

_____

_____

Outdoor Recreation

1 2 3 4 5 .....(1) Increase public acquisition, management, and development of outdoor recreation areas to meet future recreation needs.

1 2 3 4 5 .....(2) Rely more on private development of outdoor recreation, while publically acquiring, managing, and developing some outdoor recreation areas.

1 2 3 4 5 .....(3) Provide recreation facilities for high-density use in relatively small areas (e.g., near urban areas).

1 2 3 4 5 .....(4) Provide recreation facilities for low-density use in relatively large areas.

1 2 3 4 5 .....(5) Consider major river corridors for protection through state natural, wild and scenic river programs.

1 2 3 4 5 .....(6) Do not consider major river corridors for inclusion in state natural, wild and scenic river programs.

(7) Comments: _____

_____

_____

Rural Flooding

1 2 3 4 5 .....(1) Undertake channel modification where economically justified.

1 2 3 4 5 .....(2) Limit stream alterations to clearing and snagging where economically justified.

1 2 3 4 5 .....(3) Undertake channel modification only if environmental impacts are minimized.

1 2 3 4 5 .....(4) Retain channels in current condition.

1 2 3 4 5 .....(5) Discourage the development of noncompatible uses of the flood plain through flood plain controls and management.

1 2 3 4 5 .....(6) Encourage development of the flood plain to maximize economic benefits.

(7) Comments: _____

_____

_____

Urban Flooding

1 2 3 4 5 .....(1) Develop flooding programs to minimize environmental disruption stressing nonstructural controls such as flood plain legislation, flood insurance, flood warning signs, and public education.

1 2 3 4 5 .....(2) Utilize a combination of economically justified structural projects, clearing and snagging of streams, and nonstructural controls to minimize reduction in the tax base and property values.

(3) Comments: _____

_____

_____

Maumee Bay Problems

1 2 3 4 5 .....(1) Stress the improvement of environmental conditions for Maumee Bay, and limit economic development to that which is compatible with an improved Bay environment.

(2) Focus on economic development of the Bay including:

1 2 3 4 5 .....(a) commercial fishing.

1 2 3 4 5 .....(b) economical maintenance of navigation channels, including disposal of dredge spoil.

1 2 3 4 5 .....(c) encouragement of industrial development on spoil areas.

(3) Comments: _____

_____

_____

PART III

Please provide the information below.

AGE: _____

ZIP CODE: _____

OCCUPATION: _____

LENGTH OF TIME RESIDENT IN THE MAUMEE BASIN_____

DID YOU ATTEND ONE OF THE PUBLIC FORUMS DURING JANUARY?_____ IF SO, AT WHICH LOCATION?_____

5
OTHER STATEMENTS ON THE PLANS

Several written statements were brought to the forums or mailed in following the forums by some attendees. However, the forums were arranged for purposes of informal discussion by attendees and time was not available to present prepared statements. The written statements are not reproduced in this report. These statements may be inspected in the offices of the Great Lakes Basin Commission or a copy may be obtained by writing to the Study Manager. The following written statements are on file:

1) Review of Maumee River Basin, Level B Study, Alternative Plans for Public Action. Toledo Metropolitan Area Council of Governments (TMACOG) (1/12/76)

2) Letter concerning Maumee River Basin considerations. Karl W. Koch, President, Consolidated Bottling Co., Lima, Ohio (1/13/76)

3) Letter concerning Maumee Bay. Richard G. Micka, Lake Erie Advisory Committee (1/19/76)

4) Statement from the Indiana Izaak Walton League. Mrs. Thomas E. Dustin (1/20/76)

5) Letter concerning the Maumee Level B alternatives. Mary McCormack and Priscilla Grim, League of Women Voters of Toledo, Lucas County (2/3/76)

6) Letter concerning the Maumee Level B alternatives. Jane L. Forsyth, Bowling Green State University (2/4/76)

7) Letter concerning a recommended course of action for Maumee Bay. Richard G. Micka, Lake Erie Advisory Committee (2/17/76)

8) Letter concerning CAC Goals Report, Alternatives, and the Questionnaire. Jack Kishler (2/18/76)

9) Letter and attachments concerning conservation and organic agriculture, Victor Grote, Ohio Federation Conservation Club (1/26/76)

Typical forum participants assemble to express opinions and review alternatives. Comments have been received from others who were unable to attend the forums.

6
PUBLIC FORUM PARTICIPANTS

This section contains a listing of all who registered as public forum attendees and work group participants. It begins with a table showing the local coordinators for each forum and the moderators and coordinators for each work group. Their names also appear in the attendance list, organized by forum location, which follows. Everyone on this attendance list will receive a copy of this report. Others who desire a copy should write to the Maumee Study Manager at the Great Lakes Basin Commission.

There may be misspellings in the following lists due to their being transcribed from handwritten cards, some of which were difficult to read.

Coordinators, Moderators, and Recorders

Location	Coordinator	Group	Moderator	Recorder
VAN WERT, OH	Leigh Eisenhauer	1 & 2	George Ropp/Jim Piper	Jim Piper/George Ropp
		3	Carlos Waltz	C. D. Pennell
		4 & 5	L. E. Eisenhauer	L. E. Eisenhauer
LIMA, OH	Ramond Hanes	1 & 2	Dr. David Hagar	Pat Muniyappa
		3	Larry Creeger	Charles Kiphart
		4	Sharon Bresler	Charles Foster
		5	Ann R. Lauer	Jency Brown
FINDLAY, OH	Larry Kandel	1 & 2	Harry Freeman	Steven Roser
		3	Jim Daley	David Schneider
		4	Robert L. Morrison	Robert L. Morrison
		5	Tim Brugeman	Barb DeHays
TOLEDO, OH	June Brown and Suzanne Wilkins	1 & 2	Joseph Ballard	Ted J. Ligibel
		3	George Kunkle	Judith M. Verny
		4	Tom Kovacik	Virginia Clifford
		5	Art Brewer	Doris Goldman
		6	Peter Fraleigh	Judi Young
FT. WAYNE, IN	Ernie Lesiuk and Angela Derheimer	1 & 2	Gil Latz	Gil Latz
		3	Ernie Lesiuk	Guy Beerbower
		4	Karen Griggs	Ethyle R. Bloch
		5	Dr. Jim Haddock	Mark Rondot
DEFIANCE, OH	Harold Rohrs	1 & 2	Albert Schroeder	Kenneth W. White
		3	Tom Schultz	Steve Mohr
		4	Gino Silvestri	Paul H. Jones
		5	David M. Schumm	David M. Schumm
NAPOLEON, OH	Frank DuByne and Agnes Hooley	1 & 2	Bill Hensley and Ernie Vorwerk	Agnes M. Hooley
		3	Robert Cole	Lee Box
		4	Herbert Salsbury	Mike Maringer
		5	Dave Reed	Sylvia Salsbury
ADRIAN, MI	Art Brewer	1 & 2	Norman Bless	Dyle Henning
		3	Jacob Venema	Dale Storrer
		4 & 5	Dan Bruggeman	Tom Thrall

Maumee Public Forum, Van Wert, Ohio, January 12, 1976

Arnold, Robert, Indiana Parks & Recreation Association, Ft. Wayne, IN (CAC Vice-Chairman)
Baker, Darle, Van Wert County Farm Bureau, Ohio City
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Clark, James, Farming, Van Wert
Darrah, Roger, USDA-SCS, Van Wert
Derheimer, Angie, Ft. Wayne Park Board, Ft. Wayne, IN
Edwards, F. B., Soil & Water Conservation District, Van Wert
Eichler, Paul, Farming, Rockford
Eisenhauer, Leigh, Maumee Watershed Conservancy District, Van Wert (CAC member)
Etzler, Erwin, Farming, Convoy
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Gorski, Wayne, USEPA, Chicago, IL (Planning Board member)
Gregorka, David, GLBC Staff, Ann Arbor, MI
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Keller, John, Lima
Keller, Mrs. John, Lima
Lehman, Lloyd, Farming, Van Wert
Mathew, Clifford, Van Wert County, Ohio City
Oetzel, S., Van Wert
Piper, Jim, USDA-SCS, Van Wert
Pratte, George, Farming, Spencerville
Rager, Lloyd, Farming, Van Wert
Ropp, George, County Extension Agent, Van Wert
Schraadt, David, Ohio City
Schult, A. W., City of Van Wert, Van Wert
Schuman, Remhardt, Farming, Convoy
Schwieterman, Edgar, City of Delphos, Delphos
Swinnel, C. D., Van Wert
Waltz, Carlos, Van Wert Regional Watershed, Van Wert
Wright, Harmon, Farming, Spencerville
Yoder, Charles, GLBC Staff, Ann Arbor, MI
Zeller, William, Ohio EPA, Columbus (Assistant Study Manager)

Maumee Public Forum, Lima, Ohio, January 13, 1976

Adams, John, Bureau of Vocational Rehabilitation, Lima
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Betche, Ken, Lima Regional Planning Commission, Lima
Blair, Daniel, Kohli & Kaliher Engineering, Lima
Bresler, S. D., Jones & Henry Engineering, Lima
Brim, Warren, Audubon Society, Cridersville
Brown, Jency, Johnny Appleseed Metro Park District, Lima
Burden, Steven, Lima
Creeger, L. D., Farming, Lima
DeFries, Larry, Chamber of Commerce, Lima
Dingledine, M., Wapakoneta
Dunahay, L. V., Farming, Lima
Edens, Marshall, USDA-SCS, Columbus (Planning Board member)
Foster, C. T., Ohio DNR, Elida
Frost, Anne, American Association of University Women, Lima
Frost, R. M., Lima
Gault, Galen, City of Lima, Lima
Gehr, Robert, UAW-CAP, Cridersville
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Gossman, Russel, UAW Community Action Program Council, Lima
Gray, Gary, USDA-SCS, Hardin County, Kenton
Gregorka, David, GLBC Staff, Ann Arbor, MI
Grote, Victor, Putnam County Conservation Alliance, Kalida
Hagar, David, Geology Dept., Ohio State University-Lima, Lima
Hanes, Ray, Regional Planning (TAC), Lima (CAC member)
Hefner, Bryan, Ohio Farmers Union, Lima
Hepp, Al, Wapakoneta
Hollinge, Henry, Kohli & Kaliher Engineering, Lima
Howe, Roger, Wapakoneta
Howell, Rick, Lima-ACRPC, Lima
Irwin, Carl, Ohio Farmers Union, Columbus Grove
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Jones, Norman, Ohio Farmers Union, Columbus Grove
Kishler, Jack, St. Marys
Lauer, Ann, Johnny Appleseed Metro Park District, Lima
Moody, Howard, City of Lima, Lima
Muniyappa, Pat, Lima-ACRPC, Lima
Myers, James, Kohli & Kaliher Engineering, Elida
Myers, Leroy, Lima-Allen County Regional Planning Commission, Lima
Norris, Bill, Wright State University, Celina
Remsburg, Harold, Hardin County Engineer, Ada
Robinette, Frank, WIMA, Lima
Rose, Jack, Ohio Farmers Union, Harrod
Ross, C. E., Allen County Regional Planning Commission, Lima
Sanders, David, USDA-SCS, St. Johns
Smith, Kenneth, Ohio State University-Lima Faculty, Lima
Snyder, Roy, Ohio State University-Lima Faculty, Lima
Thomas, Noble, Lima
Thompson, Thomas, United Auto Workers CAP Council, Cridersville
Tighe, Frank, Hardin County Soil & Water Conservation District, Ada
Troyer, Fred, Farming, Elida
Troyer, Robert, Farming, Elida
Wannemacher, Norval, Farming, Elida
Wannemacher, Mrs. Norval, Farming, Elida
Watkins, Dean, USDI-Fish & Wildlife Service, East Lansing, MI (Planning Board member)
Woolley, George, Allen County Engineer, Lima
Yoder, Charles, GLBC Staff, Ann Arbor, MI
Zeller, William, Ohio EPA, Columbus (Assistant Study Manager)

Maumee Public Forum, Findlay, Ohio, January 14, 1976

Alexander, Mervin, Farming, Findlay
Bakaitis, N. S., Findlay College Faculty, Findlay
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Burlof, Russell, Farming, Findlay
Brewer, Art, Morenci, MI (CAC Chairman)
Browne, Joe, Findlay
Browne, Westelle, Findlay
Brugeman, Timothy, Hancock Park District, Findlay
Campbell, Nondau, Findlay College Faculty, Findlay
Carothers, Clinton, Farming, Forest
Chambers, Bennett, Ohio EPA, Bowling Green
Clinger, Vernon, Farming, Forest
DeHays, Barbara, Hancock Regional Park District, Findlay
Edens, Marshall, USDA-SCS, Columbus (Planning Board member)
Freeman, Harry, Cooperative Extension Service, Findlay
Geiger, W. O., Board of Public Affairs, Bluffton
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Gregorka, David, GLBC Staff, Ann Arbor, MI
Groman, Morris, Board of Public Affairs, Bluffton
Hall, Russell, Farming, Dunkirk
Hatcher, Richard, Farming, Forest
Henry, Lawrence, AAUW, Newspaper, Findlay
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Johnson, Gerald, Farming, Findlay
Jolliff, Kevin, Farming, Forest
Jolliff, Paul, Farming, Forest
Jones, James, Farming, Forest
Jones, Mrs. James, Farming, Forest
Joseph, John, Findlay College Faculty, Findlay
Kandel, Larry, Ohio Farm Bureau Federation, Inc., Findlay (CAC member)
Kellogg, Dale, Farming, Forest
Kellogg, Rex, Farming, Forest
Mauer, Bernard, Ohio DNR, Findlay
McCune, Norman, Jackson Township Zoning Commission, Forest
McVitty, Helen, Forest
McVitty, James, Hardin Regional Planning Commission, Forest
Miller, Berneda, Farm Bureau Women's Committee, Forest
Miller, Lowell, Farming, Forest
Moorhead, Reed, Farming, Findlay
Morrison, Robert, Hancock County Engineering, Findlay
Moyer, Burl, Post Offfice, Pandora
Niese, Vincent, Putnam County Commission, Leipsic
Oulcheer, Byran, Findlay
Page, Ronald, USDA-SCS, East Lansing, MI
Pifer, Caroline, AAUW, Findlay
Price, Alma, Farming, Forest
Price, Lester, Farming, Forest
Renninger, Donald, Mayor of Findlay, Findlay
Rice, Mary, Findlay
Roser, Stephen, Hancock County Soil & Water Conservation District, Findlay
Sommer, Francis, Putnam County Farm Bureau, Pandora
Spahr, David, Farming, Findlay
Watkins, Dean, USDI-Fish & Wildlife Service, East Lansing, MI (Planning Board member)
Watts, Don, Farming, Findlay
Wells, Terry, Ohio DNR, Columbus
Wilkerson, Bill, Farming, Forest
Wilson, Alva, Farming, Forest
Yoder, Charles, GLBC Staff, Ann Arbor, MI
Zeller, William, Ohio EPA, Columbus (Assistant Study Manager)

Maumee Public Forum, Toledo, Ohio, January 15, 1976

Ambrose, Tom, Ottawa County Soil & Water Conservation District, Oak Harbor
Anderson, Duane, Sierra Club, Toledo
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Ballard, Joseph, TMACOG, Toledo
Bernhagen, Ralph, Ohio DNR, Columbus
Birnieder, G. L., University of Toledo Faculty, Toledo
Bissell, Sarah, League of Women Voters, Maumee
Brewer, Art, Morenci, MI (CAC Chairman)
Bundy, Margaret, Wood County Township Trustees & Clerks Association, Haskins
Burnham, Jeffrey, Health Planning Association, Toledo (CAC member)
Cadler, Anne, Maumee
Cagle, Garry, Civil Engineering, Perrysburg
Carstensen, William, Farming, Martin
Clifford, Virginia, League of Women Voters, Toledo
Daniel, Maiyo, Toledo
Failor, Gary, Toledo-Lucas County Port Authority, Toledo
Fansler, Susan, Maumee
Fraleigh, Peter, University of Toledo Faculty, Toledo (CAC member)
Geisel, Alice, Toledo Nature Association, Toledo
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Goldman, Doris, Sierra Club, Toledo
Gregorka, David, GLBC Staff, Ann Arbor, MI
Gunderson, Hugh, Northwest Ohio Natural Resource Council, Toledo
Hanselman, Adela, Toledo Federation of Women's Clubs, Toledo
Hashley, Madge, Toledo
Hashley, Neil, Toledo
Hawkins, Jeanne, Maumee Scenic River Advisory Council, Toledo
Hawkins, Richard, Toledo Nature Association, Toledo
Heckley, Mark, University of Toledo Staff, Toledo
Hellman, Dennis, Urban Planning, Toledo
Huntley, Frank, Toledo Nature Association, Perrysburg
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Jurrens, Terry, TMACOG, Toledo
Kern, Christina, Toledo
Kern, Jeanne, Toledo
Kern, Jeff, Friends of the Maumee, Toledo
Kern, Ralph, Toledo
Kish, Linda, Toledo
Kosch, David, Maumee
Kovacik, Tom, City of Toledo, Toledo
Kunkle, George, Earthview, Inc., Toledo
Lange, Homer, Maumee Scenic River Advisory Council, Bowling Green
Ligibel, Ted, Maumee Valley Audubon Society, Toledo
Loo, Ruben, Holland
Lunbeck, W. E. Perrysburg
Matheny, Dale, Plain Township Trustee, Bowling Green
McCormack, Mary, League of Women Voters, Toledo
Megowen, Charles, Toledo
Michaels, Kenneth, Toledo
Ottney, Thomas, Elmore
Peterman, William, Bowling Green State University Faculty, Bowling Green
Pinsak, Arthur, NOAA, Ann Arbor, MI
Retzke, Roy, City of Toledo, Toledo
Reynolds, Frank, Oregon
Rickenberg, James, USDA-SCS, Maumee

Toledo (Continued)

Ritter, Mrs. S., Toledo
Rodesky, Dan, City of Bowling Green, Bowling Green
Russelmann, H. B., TMACOG, Lambertville
Schram, Gene, Toledo Edison Company, Toledo
Shaffer, Earl, Bowling Green Environmental Commission, Bowling Green
St. John, Robert, Toledo
Stager, John, Toledo
Stratman, John, Jones & Henry Engineering, Toledo
Suter, John, USDA-Wood County ASCS Office, Perrysburg
Taylor, Terry, Toledo
Thompson, George, Lucas County Farm Bureau, Holland
Thompson, Lutricia, Toledo
Tressel, Jeff, Toledo
Verny, Judy, Toledo
Waterbury, Beatrice, League of Women Voters, Toledo (CAC member)
Waterbury, Neil, Toledo
Wilkins, Suzanne, Perrysburg (CAC member)
Woodward, James, Lucas County Engineer, Maumee
Wordelman, Steve, Jones & Henry Engineering, Toledo
Yoder, Charles, GLBC Staff, Ann Arbor, MI
Young, Judi, Toledo League of Women Voters, Sylvania
Zeller, William, Ohio EPA, Columbus (Assistant Study Manager)

Maumee Public Forum, Defiance, Ohio, January 21, 1976

Aten, Mrs. Fred, Defiance
Aten, Fred, USDA-SCS, Defiance
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Ball, Robert, USDA-SCS, Defiance
Beardslee, Howard, Defiance
Brown, Grant, Williams County Regional Planning Commission, Bryan
Buehrer, Roger, *Crescent News,* Defiance
Busteed, Joann, Defiance League of Women Voters, Defiance
Cahill, Thomas, Resource Management Association, West Chester, PA
Cleland, William, Farming, Hicksville
Crowner, Daniel, USDA-SCS, Bryan
Daeger, Paul, Soil & Water Conservation District, Defiance
Das, Prasanta, Case Western Reserve University, Cleveland
deRoth, G. C., The Defiance College Faculty, Defiance
Ehlinger, Jack, Defiance
Ehlinger, Jean, League of Women Voters, Defiance
Flesher, Cecil, USDA-SCS, Bryan
Forsyth, Jane, Bowling Green State University Faculty, Bowling Green
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Gregorka, David, GLBC Staff, Ann Arbor, MI
Greim, Carl, Defiance
Hanks, Edward, Defiance Area Chamber of Commerce, Defiance
Herrett, Roger, Ohio Division of Forestry, Defiance
Holmstrand, Mary, League of Women Voters, Defiance
Hook, R. L., Farming, Hicksville
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Johnson, Richard, City & Regional Planner, Toledo
Jones, Paul, Defiance County, Defiance
Kagy, Donald, USDA-SCS, Paulding
Kimmet, Don, Cooperative Extension, Ottawa
Lenhart, S. J., County Commissioners, Defiance
Mantell, Leigh, USDA-SCS, Ottawa
McCluskey, James, USDA-SCS, Defiance
McKarns, Hobart, Williams County Conservation League, Bryan
Mohr, Stephen, Ohio Farm Bureau Federation, Wauseon (CAC member)
Nagel, Emil, Farming, Rawson
Nagley, Julius, Defiance
Palmiter, George, Defiance
Peters, Ralph, Maumee Watershed Conservancy District, Defiance
Russell, Harold, Defiance
Schroeder, Albert, Farming, Defiance
Schultz, Fran, Wauseon
Schultz, Tom, Fulton County Regional Planning Commission, Wauseon
Schumm, David, Parks & Recreation Department, Bryan
Schwiebert, David, Kiwanis Club of Ddefiance, Holgate
Silvestri, Gino, City of Defiance Water Pollution Control Department, Defiance
Smith, Mike, Parks & Recreation Department, Bryan
Sung, Kai, Case Western Reserve University, Cleveland
Thompson, Byron, USDA-SCS, Ayersville
Warne, Mary, League of Women Voters, Defiance
Watkins, Dean, USDI-Fish & Wildlife Service, East Lansing, MI (Planning Board member)
Westrick, Francis, Defiance County Regional Planning Commission, Defiance
Yoder, Charles, GLBC Staff, Ann Arbor, MI

Maumee Public Forum, Napoleon, Ohio, January 22, 1976

Aeschliman, Ora, Farming, Fayette
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Batdorf, Robert, Farm Bureau, Wauseon
Benecke, Donald, Farming, Napoleon
Bennett, Richard, Farming, Napoleon
Blair, Robert, Farming, Napoleon
Bordner, Vincent, Regional Planning, Montpelier
Box, Lee, Campbell Soup Company, Liberty Center
Brehm, Lowell, Farm Bureau, Swanton
Brewer, Art, Morenci, MI (CAC Chairman)
Brubaker, Moe, *Northwest Signal,* Napoleon
Canfield, Calvin, Farming, Fayette
Cole, Robert, Extension Service, Napoleon
Das, Prasanta, Case Western Reserve University, Cleveland
Dishop, Elmer, Farming, Napoleon
DuByne, Frank, Campbell Soup Company, Napoleon (CAC member)
DuByne, Mrs. Frank, Napoleon
Fager, Leonard, Farming, Delta
Fether, Andrew, Farming, Archbold
Finch, Richard, Civil Engineering, Sylvania
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Graf, John, Farming, Fayette
Gramling, Glenn, Farm Bureau, Liberty Center
Gregorka, David, GLBC Staff, Ann Arbor, MI
Gregory, Dr. J. F., Napoleon
Gregory, Mrs. J. F., Napoleon
Griffith, Charles, Henry Regional Planning Commission, Liberty Center
Hall, Lyman, Soil & Water Conservation District, Napoleon
Hall, Robert, Cooperative Extension Service, Napoleon

Napoleon (Continued)

Helberg, Roger, Farming, Napoleon
Helier, William, Farming, Napoleon
Hensley, William, USDA-SCS, Napoleon
Hoffman, Arthur, Farming, Archbold
Homan, James, Henry County Soil & Water Conservation District, Napoleon
Hooley, Agnes, Bowling Green State University Faculty, Bowling Green (CAC member)
Huff, James, Napoleon
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Jones, Marvin, Liberty Center
Kinane, Andrew, Henry Regional Planning Commission, Napoleon
Kryder, Richard, Napoleon
Leatherman, Elmer, Farm Bureau, Napoleon
Maringer, Mike, Napoleon
Marlow, Robert, Wood County Soil & Water Conservation District, Grand Rapids
Mazur, Paul, Ohio EPA, Napoleon
McClarren, L. H., Farm Bureau, Delta
Mekus, John, Consulting Engineer, Bowling Green
Meyer, James, Farm Bureau, Napoleon
Mizer, Eileen, Delta
Mizer, Encil, Delta
Myers, Jon, Henry County Engineers Office, Liberty Center
Nagel, Gene, USDA-SCS, Bowling Green
Niebel, Paul, Farming, Napoleon
Nietz, Robert, Wood County Soil & Water Conservation District, Wayne
Pfau, Paul, Henry County USDA-SCS, Holgate
Phillips, James, Farming, Napoleon
Piatt, Sue, Ohio EPA, TMACOG, Columbus
Reed, Dave, Black Swamp Audubon Society, Napoleon
Robinson, Harold, Village Council, Wauseon
Roth, Glen, Farming, Archbold
Salsbury, Herbert, Campbell Soup Company, Napoleon
Salsbury, Sylvia, Napoleon
Samlow, Delmer, Henry III F. B. Council, Napoleon
Schuette, Fred, Henry Soil & Water Conservation District, Napoleon
Smith, Roger, Napoleon
Sonnenberg, Roger, USDA-SCS, Liberty Center
Spiess, Lyle, County Agent, Liberty Center
Speith, Glenn, Farming, Napoleon (CAC member)
Sung, Kai, Case Western Reserve University, Cleveland
Sutton, Wendell, Farming, Fayette
Vorwerk, Ernest, Maumee Scenic River Council, Napoleon
Yoder, Charles, GLBC Staff, Ann Arbor, MI
Zeller, William, Ohio EPA, Columbus (Assistant Study Manager)

Maumee Public Forum, Fort Wayne, Indiana, January 20, 1976

Arnold, Robert, Indiana Parks and Recreation Association, Ft. Wayne (CAC Vice-Chairman)
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor, MI (Planning Board member)
Bandemer, Irwin, Fort Wayne
Barrett, James, Huntertown
Beerbower, Guy, Farm Bureau, Grabill (CAC member)
Block, Ethyle, League of Women Voters, Fort Wayne
Certia, Peter, Fort Wayne
Dawald, Earl, Adams County Park Board, Geneva
Derheimer, Angela, Indiana Parks and Recreation Association, Ft. Wayne
Dustin, Jane, Indiana Izaak Walton League, Ft. Wayne (CAC member)
Elcock, Charles, Indiana State Chamber of Commerce, Fort Wayne (CAC member)
Elcock, Lois, Fort Wayne
Faeth, Paul, Northeastern Indiana Regional Coordinating Council, Fort Wayne
Gersten, Philip, Corps of Engineers, Detroit, MI (Planning Board member)
Gillie, Robert, Ft. Wayne Community Schools, Fort Wayne
Gillman, Cletus, USDA-SCS, Indianapolis
Graney, Charles, State of Indiana, Fort Wayne
Gregorka, David, GLBC Staff, Ann Arbor, MI
Griggs, Karen, Izaak Walton League of America, Ashley
Haddock, James, I. U.-Purdue University Faculty, Kendallville
Hedeen, Larry, IIT, Huntington
Hilty, Gerry, Berne Conservation Club, Decatur
Hilty, Karl, Berne
Howard, Denver, City Utilities, Fort Wayne
Howard, Phil, Hidden Valleys Association, Fort Wayne
Jarecki, Eugene, GLBC Staff, Ann Arbor, MI (Maumee Study Manager)
Julran, Bruce, USDA-SCS, Auburn
Kemp, Lois, Fort Wayne
Kent, John, Region II-D Coordinating Council, Fort Wayne
Krull, Steve, Decatur & Adams County Park & Recreation Department, Decatur
Lake, Jim, Allen County Soil & Water Conservation District, Woodburn
Latz, Gil, Allen County Planning Commission, Fort Wayne
Lesiuk, Ernest, Allen County Extension Service, Fort Wayne (CAC member)
Mahoney, Dennis, Coalition for the Environment, Fort Wayne
McCain, Thomas, USDA-SCS, Fort Wayne
McCrory, Kenric, Allen County Planning Commission, Fort Wayne
Meehan, Robert, Corps of Engineers, Detroit, MI
Meier, Becky, League of Women Voters, Bluffton (CAC member)
Meir, Donald, Bluffton
Metzger, Sharon, Limberlost Girl Scout Council, Fort Wayne
Morrill, Mary, Fort Wayne
Morrill, William, Morrill Engineering, Fort Wayne
Pacer, Joyce, Coalition for the Environment, Fort Wayne
Parrott, Max, Huntertown
Patrick, Glen, City Utilities, Fort Wayne
Powe, David, Fort Wayne
Ripley, Iven, Fort Wayne
Ross, David, Ft. Wayne City Utilities, Fort Wayne
Schaber, Donald, Three Rivers Filtration Plant, Fort Wayne
Slater, Myrtle, Camp McMillen, Cedar Canyon Girl Scouts, Fort Wayne
Smith, Clarence, UAW-CAP, Fort Wayne
Smith, Ross, Fort Wayne
Stafford, John, City of Ft. Wayne, Department of Community Planning & Development, Ft. Wayne
Stenson, Jon-Eric, USEPA, Chicago, IL
Sterling, Michael, Fort Wayne
Stumpf, Richard, City of Ft. Wayne, Department of Community Planning & Development, Ft. Wayne
Taylor, Joseph, Coalition for the Environment, Fort Wayne
Tyler, David, Allen County Planning Commission, Fort Wayne
Watkins, Dean, USDI-Fish and Wildlife Service, East Lansing, MI (Planning Board member)
Wawrzyniak, Richard, Indiana DNR, Indianapolis (Planning Board member)
Webster, Frank, Izaak Walton League, Fort Wayne
Wert, Mark, *Journal-Gazette,* Fort Wayne
Whearley, Helyn, Farming, Fort Wayne
Whearley, R. L., Cedar Creek Advisory Board, Fort Wayne
Winters, Dennis, Izaak Walton League, Fort Wayne
Yoder, Charles, GLBC Staff, Ann Arbor, MI

Maumee Public Forum, Adrian, Michigan, January 27, 1976

Allen, Charles, Farming, Jasper
Baker, Francis, USDI-Bureau of Outdoor Recreation, Ann Arbor (Planning Board member)
Bless, Norman, Cooperative Extension Service, Tecumseh
Bond, Charles, USDA-SCS, Adrian
Brewer, Art, Morenci (CAC Chairman)
Brewer, Margaret, Morenci
Bruggeman, Dan, Adrian
Canfield, Cal, Farming, Fayette, OH
Daubendiek, Bertha, Michigan Nature Association, Avoca
Dougal, Sharon, USDI-Fish & Wildlife Service, Lansing
Gregorka, David, GLBC Staff, Ann Arbor
Hale, Herbert, *Daily News,* Hillsdale
Hellman, Donna, GLBC Staff, Ann Arbor
Henning, Dyle, Cooperative Extension, Adrian
Hollister, Deborah, GLBC Staff, Ann Arbor
Jarecki, Eugene, GLBC Staff, Ann Arbor (Maumee Study Manager)
Johnson, Delbert, Michigan DNR, Lansing (Planning Board member)
Lovelette, Arnold, Hillsdale County Metropolitan Planning Commission, Hillsdale
Mitchell, Don, Lenawee County Drain Office, Adrian
Nanney, Roger, USDA-SCS, Hillsdale
Nanney, Marie, Hillsdale
Nelle, William, Lenawee County Drain Office, Adrian
Oakes, Dennis, Region II Planning Commission, Jackson
Phenicie, Steve, *The Daily Telegram,* Adrian
Ross, Ken, Environmental Council of Lenawee, Adrian
Roys, Susan, Addison Community Schools, Manitou Beach
Roys, Michael, Lenawee County Drain Office, Manitou Beach
Smith, Merrill, Monroe County Soil & Water Conservation District, Temperance
Smith, Mrs. Merrill, Monroe County Soil & Water Conservation District, Temperance
Sutton, Mrs. M., Fayette, OH
Sutton, Wendell, Farming, Fayette, OH
Storrer, Dale, Farming, Morenci
Thrall, Tom, USDA-SCS, Adrian
Traut, Joe, Farming, Archbold
Venema, Jake, Blissfield Community School, Blissfield
Werstler, Richard, Farming, Jasper
Whitcher, Kaye, Aquaphase Laboratories, Adrian
Yoder, Charles, GLBC Staff, Ann Arbor
Zeiler, Charles, Planning Commission, Hillsdale

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